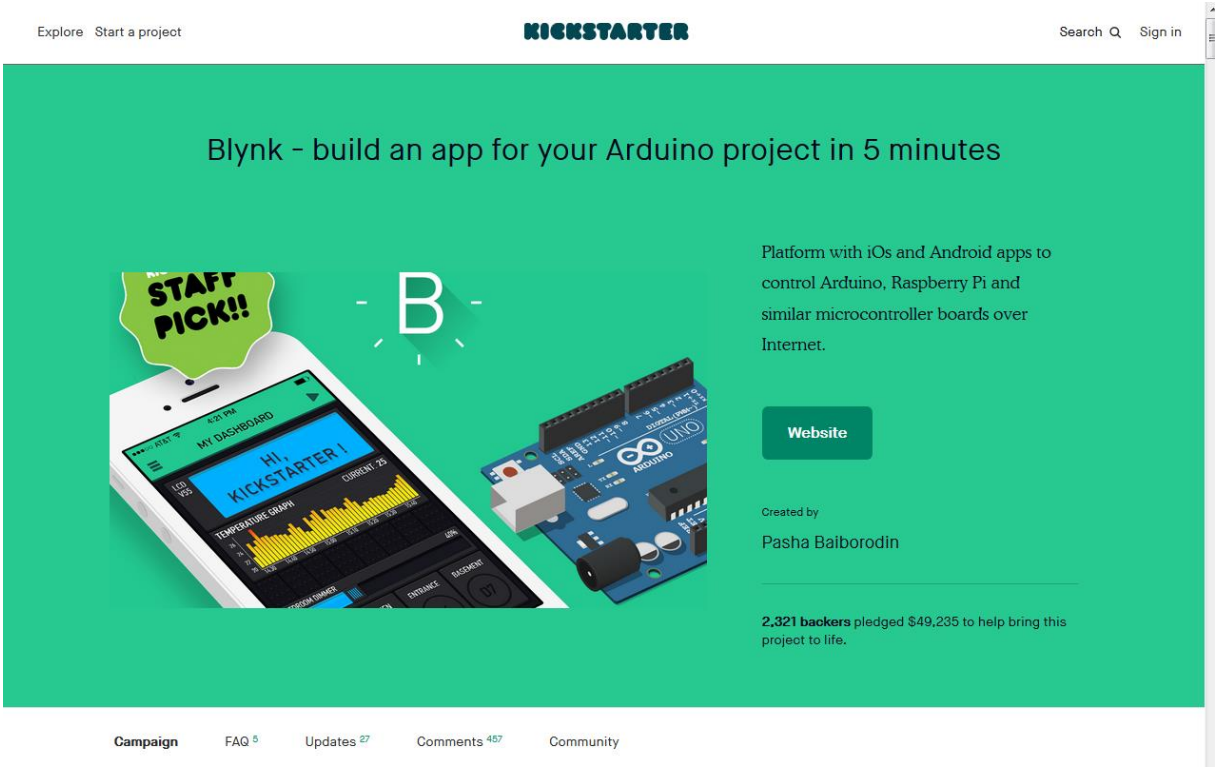
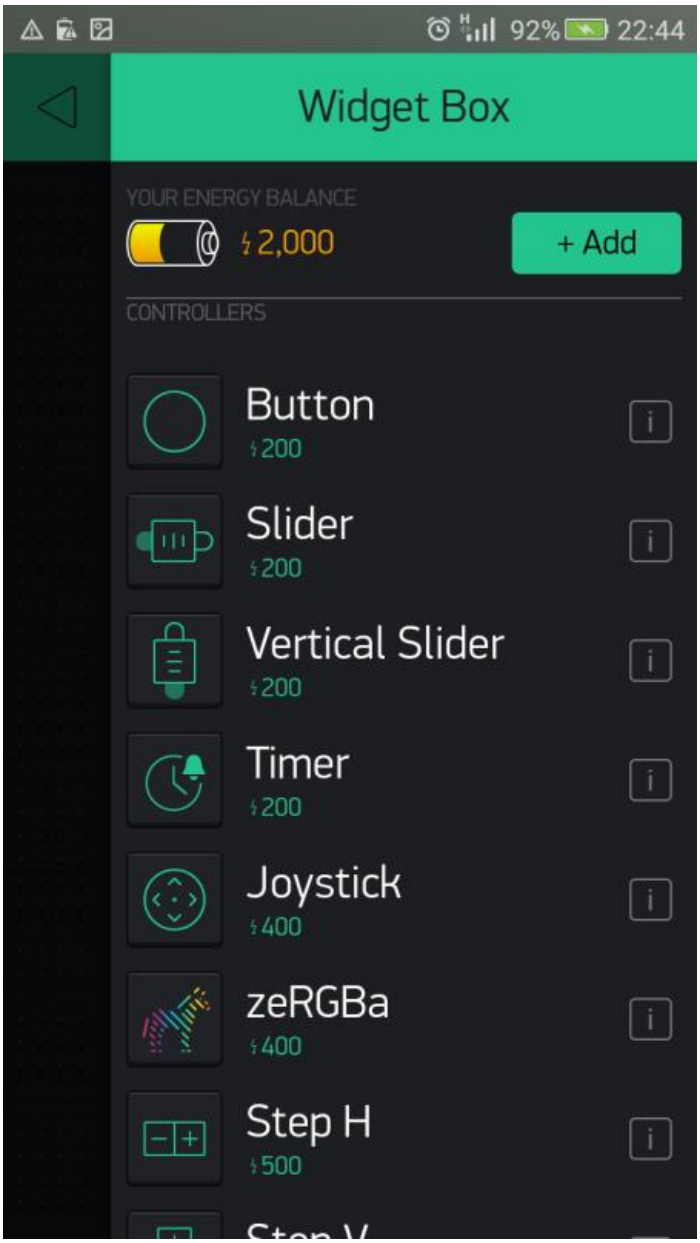
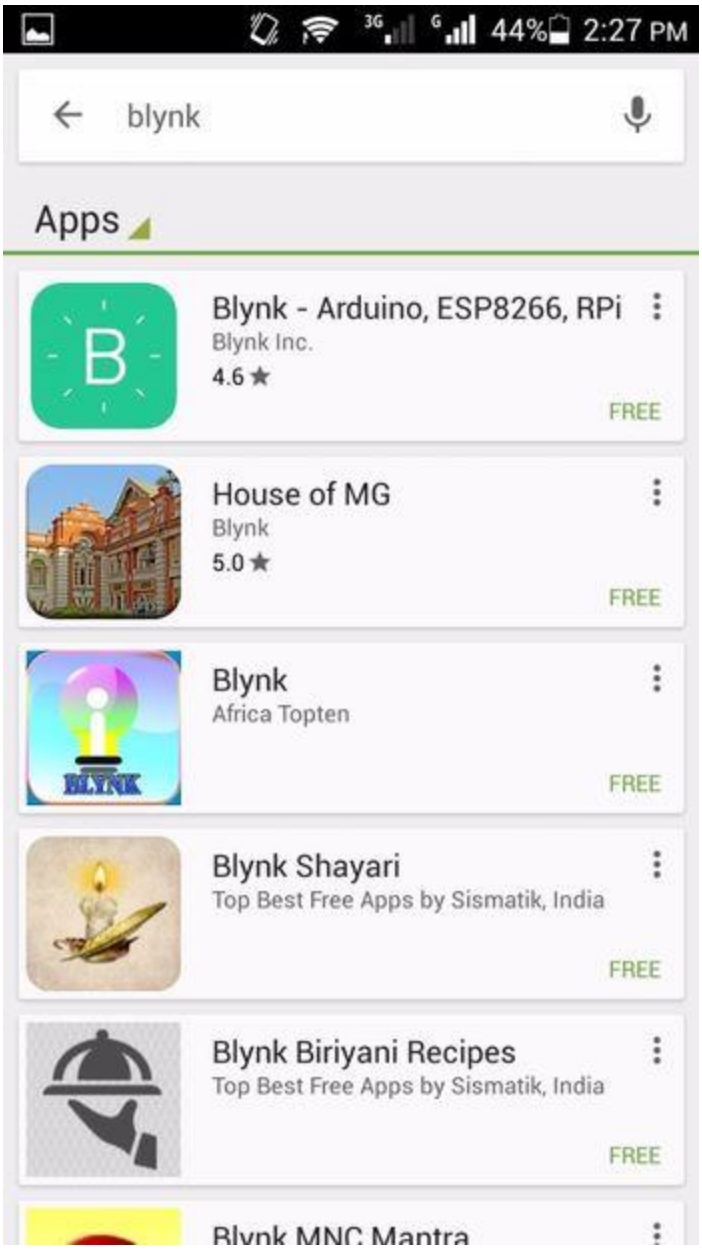
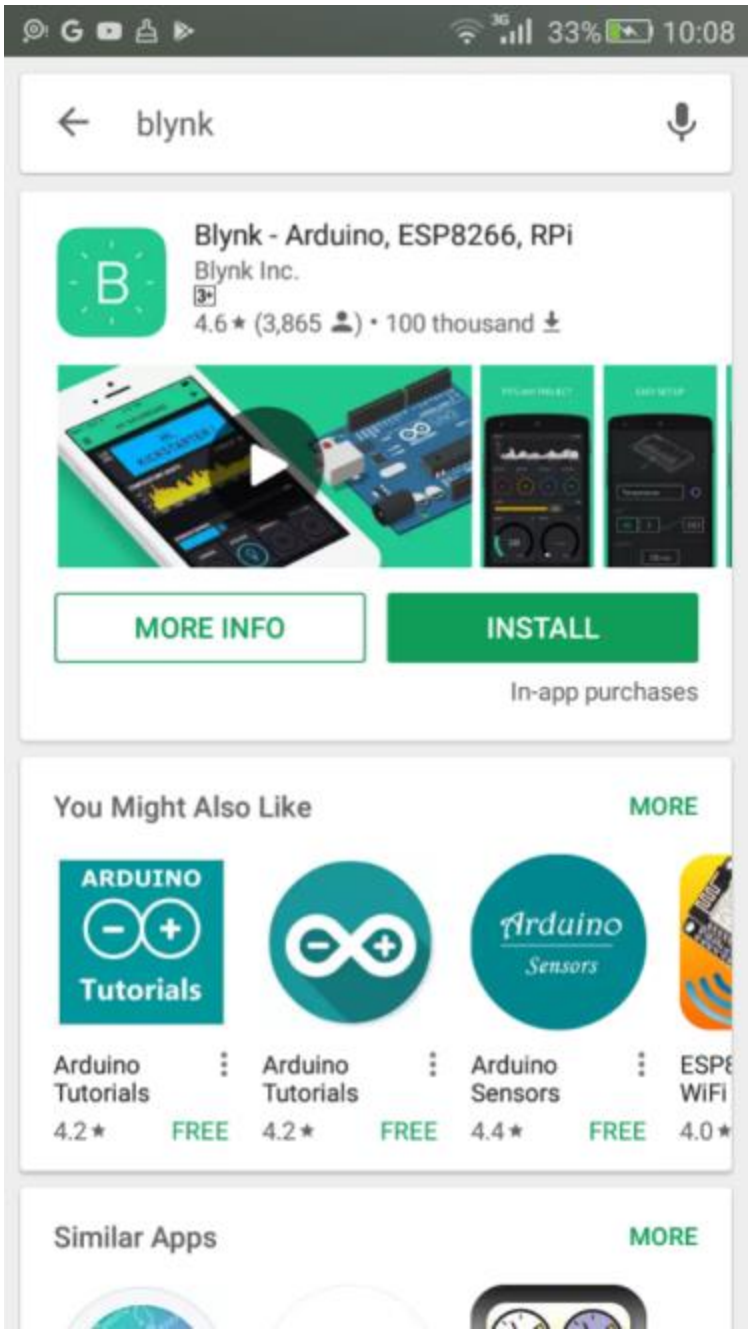
Chapter 1: Setting Up a Development Environment




92%
22:44
Widget Box
YOUR ENERGY BALANCE
2,000
+ Add
CONTROLLERS
Button
200
Slider
200
Vertical Slider
200
Timer
200
Joystick
400
zeRGBa
400
Step H
500


44% 2:27 PM
blynk
Apps
Blynk - Arduino, ESP8266, RPi
Blynk Inc.
4.6
FREE
House of MG
Blynk
5.0
FREE
Blynk
Africa Topten
FREE
Blynk Shayari
Top Best Free Apps by Sismatik, India
FREE
Blynk Biriyani Recipes
Top Best Free Apps by Sismatik, India
FREE


33% 10:08
blynk
Blynk - Arduino, ESP8266, RPi
Blynk Inc.
3+
4.6 ★ (3,865) • 100 thousand
MORE INFO
INSTALL
In-app purchases
You Might Also Like
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4.2 ★
FREE
Arduino Tutorials
4.2 ★
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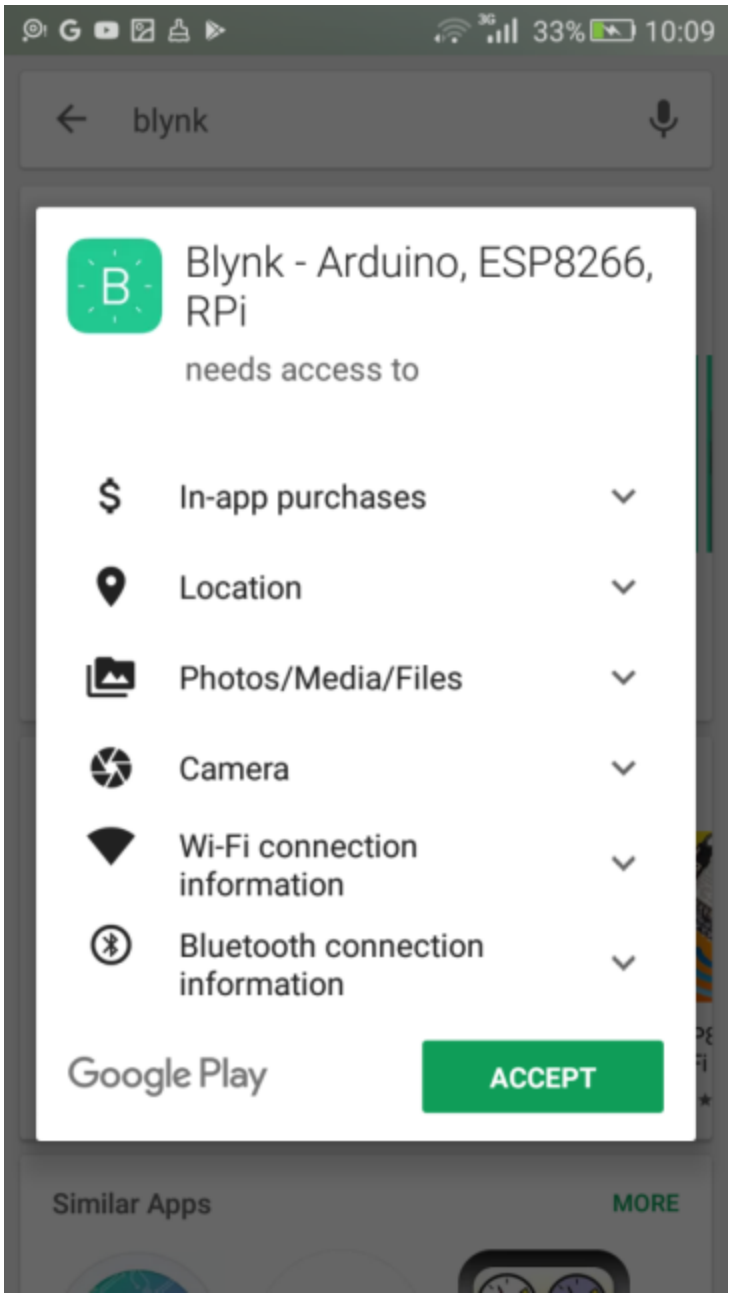
Arduino
Sensors
Arduino Sensors
4.4 ★
FREE
ESP8 WiFi
4.0 ★
Similar Apps
MORE


33% 10:09
blynk
Blynk - Arduino, ESP8266, RPi
needs access to
In-app purchases
Location
Photos/Media/Files
Camera
Wi-Fi connection information
Bluetooth connection information
Google Play
ACCEPT
Similar Apps
MORE

Blynk - Arduino, ESP8266, RPi

Blynk Inc.

3+

UNINSTALL OPEN

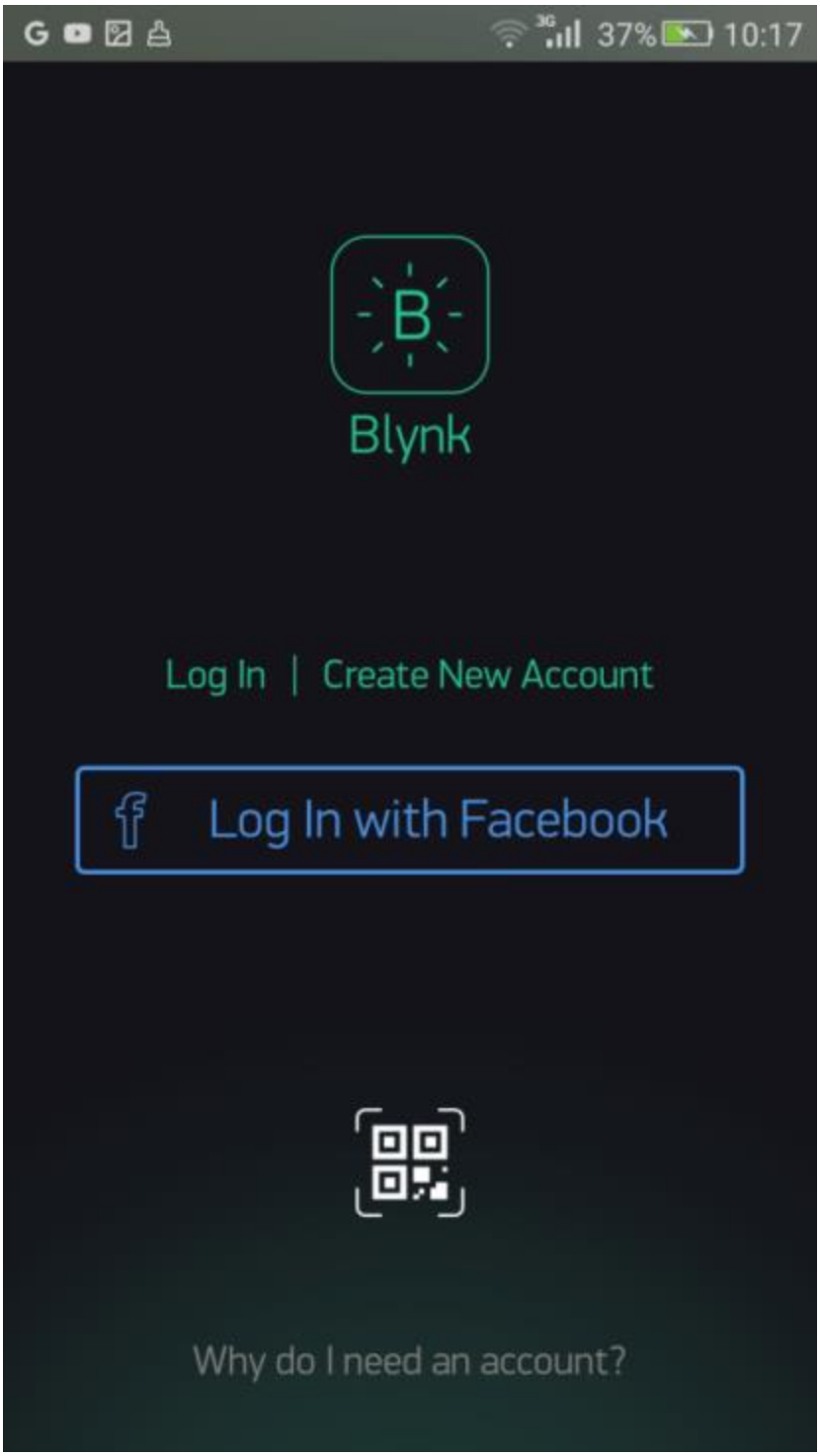
In-app purchases

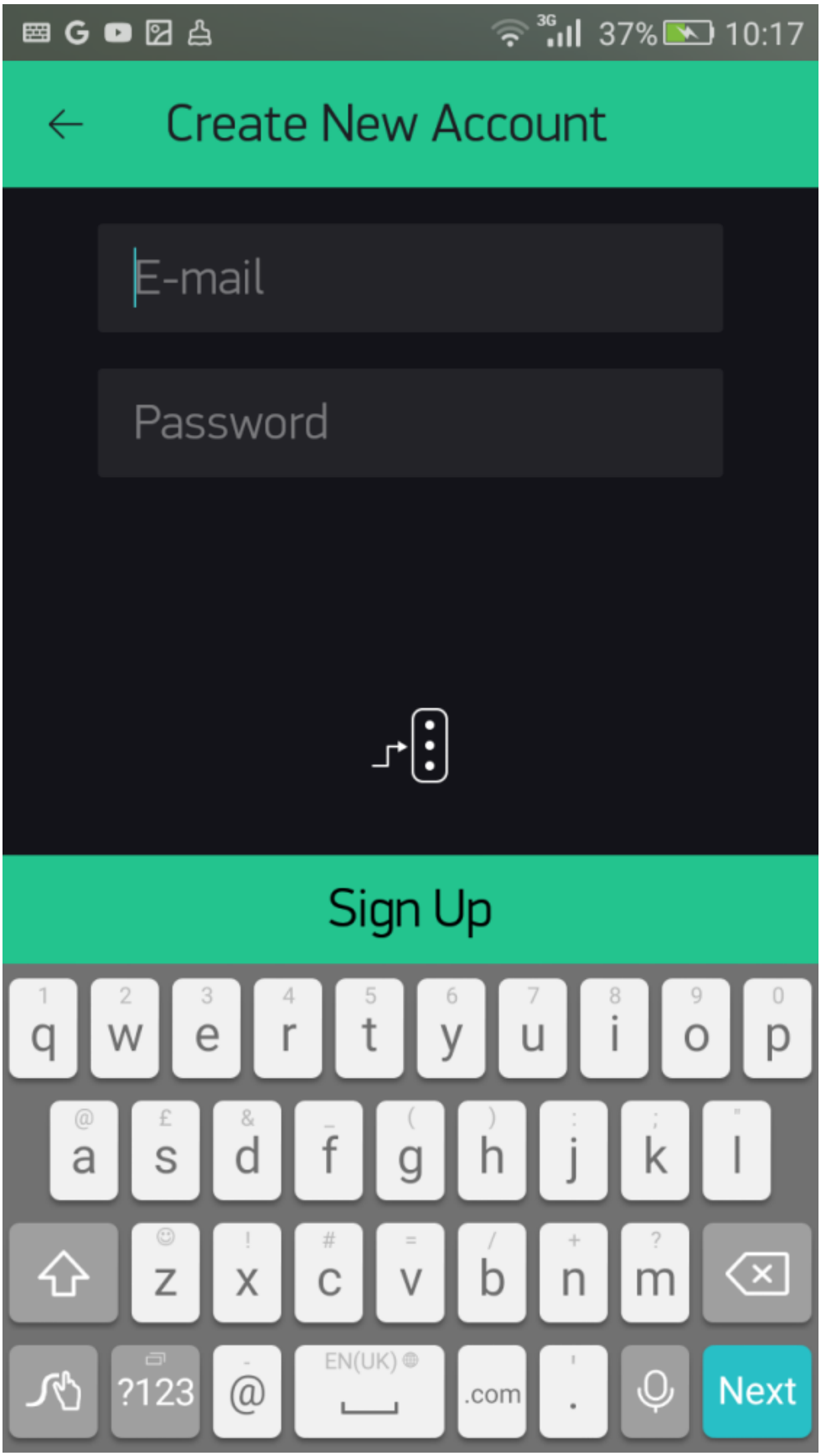
100 THOUSAND	4.6 ★★★★½		
Downloads	3,865	Tools	Similar

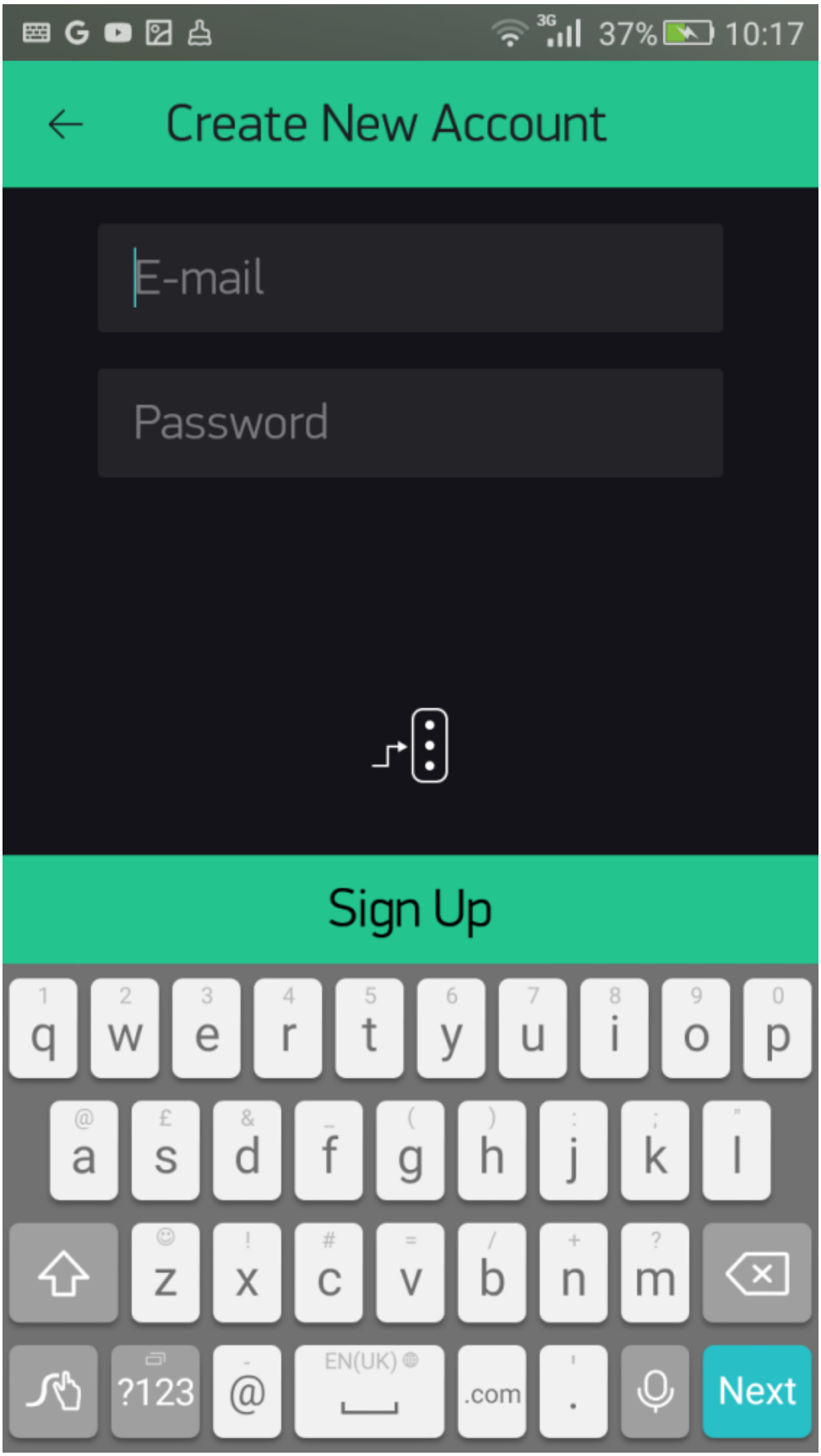
Control Arduino, ESP8266, Raspberry Pi and others with a smartphone in a minute!

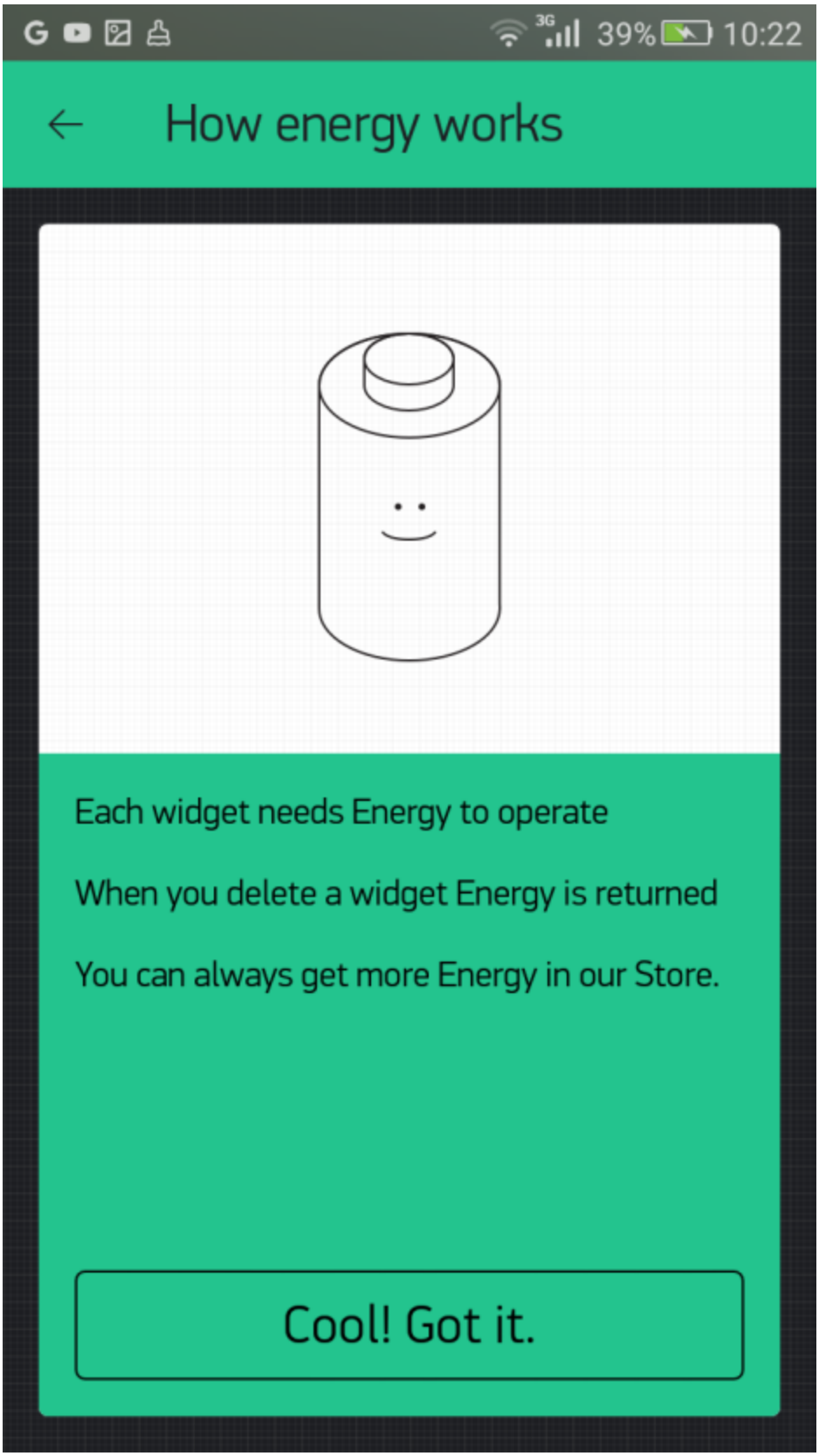
WHAT'S NEW

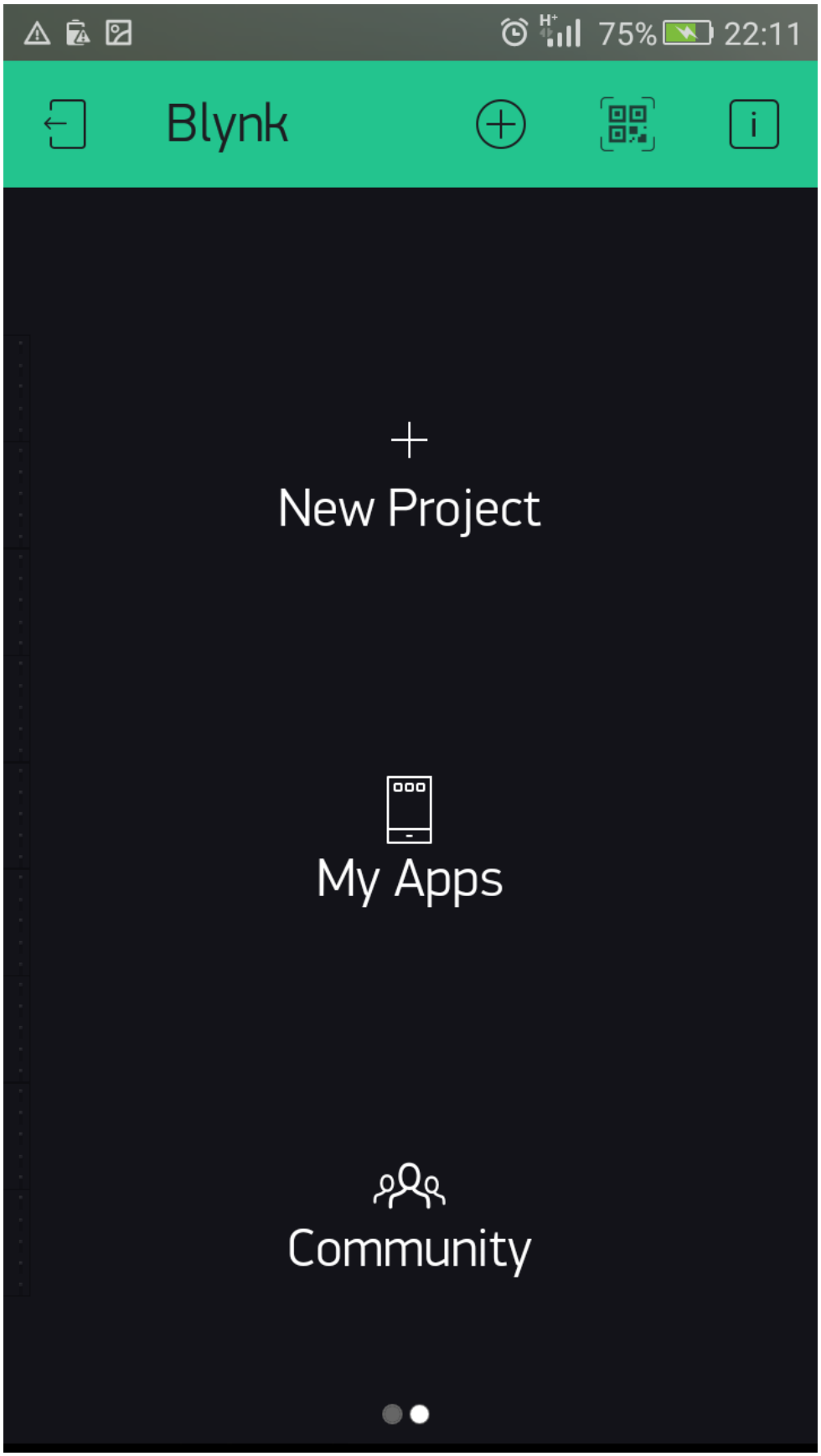
Several updates and fixes for push

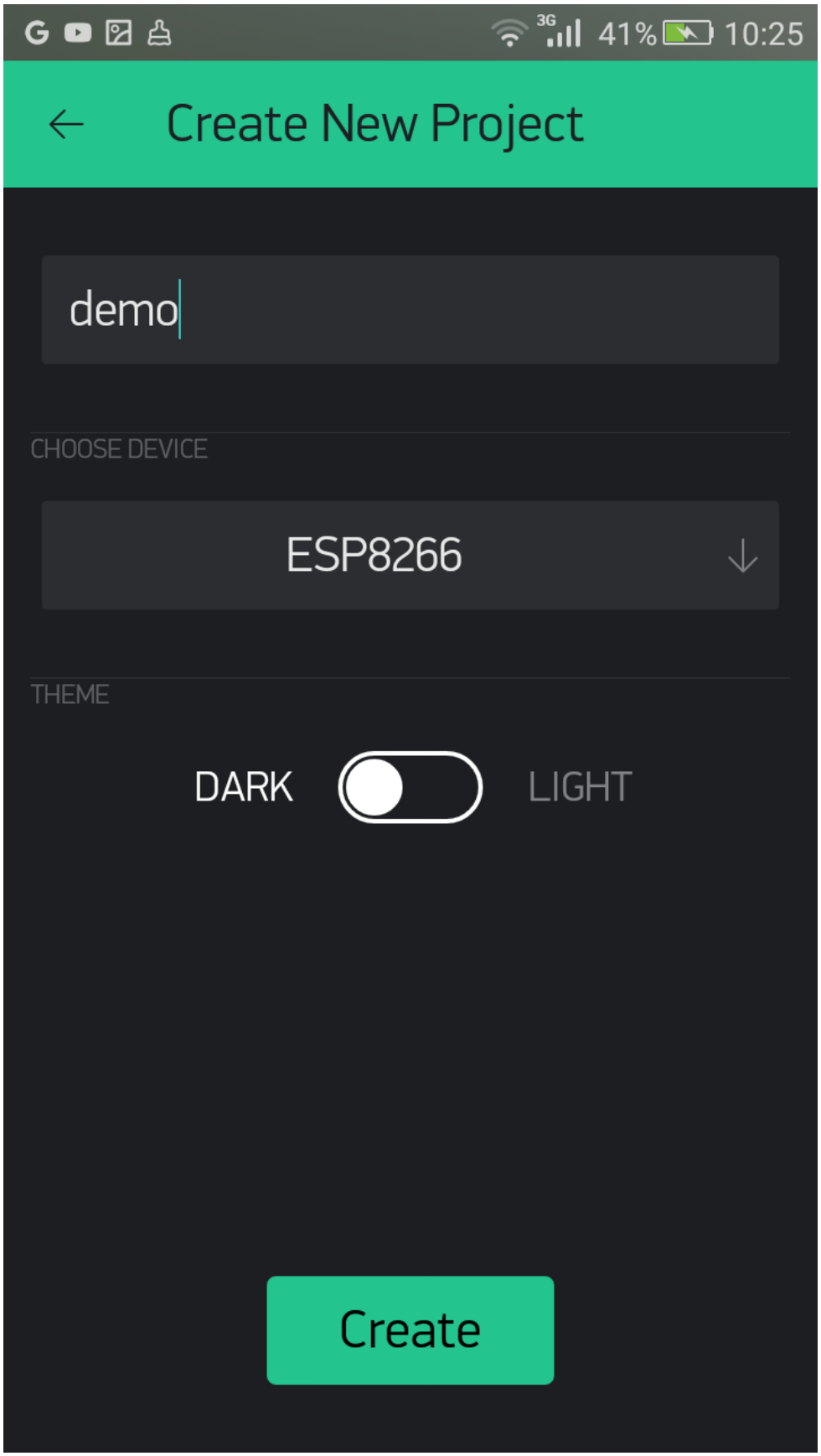

37% 10:17
B
Blynk
Log In | Create New Account
Log In with Facebook
Why do I need an account?

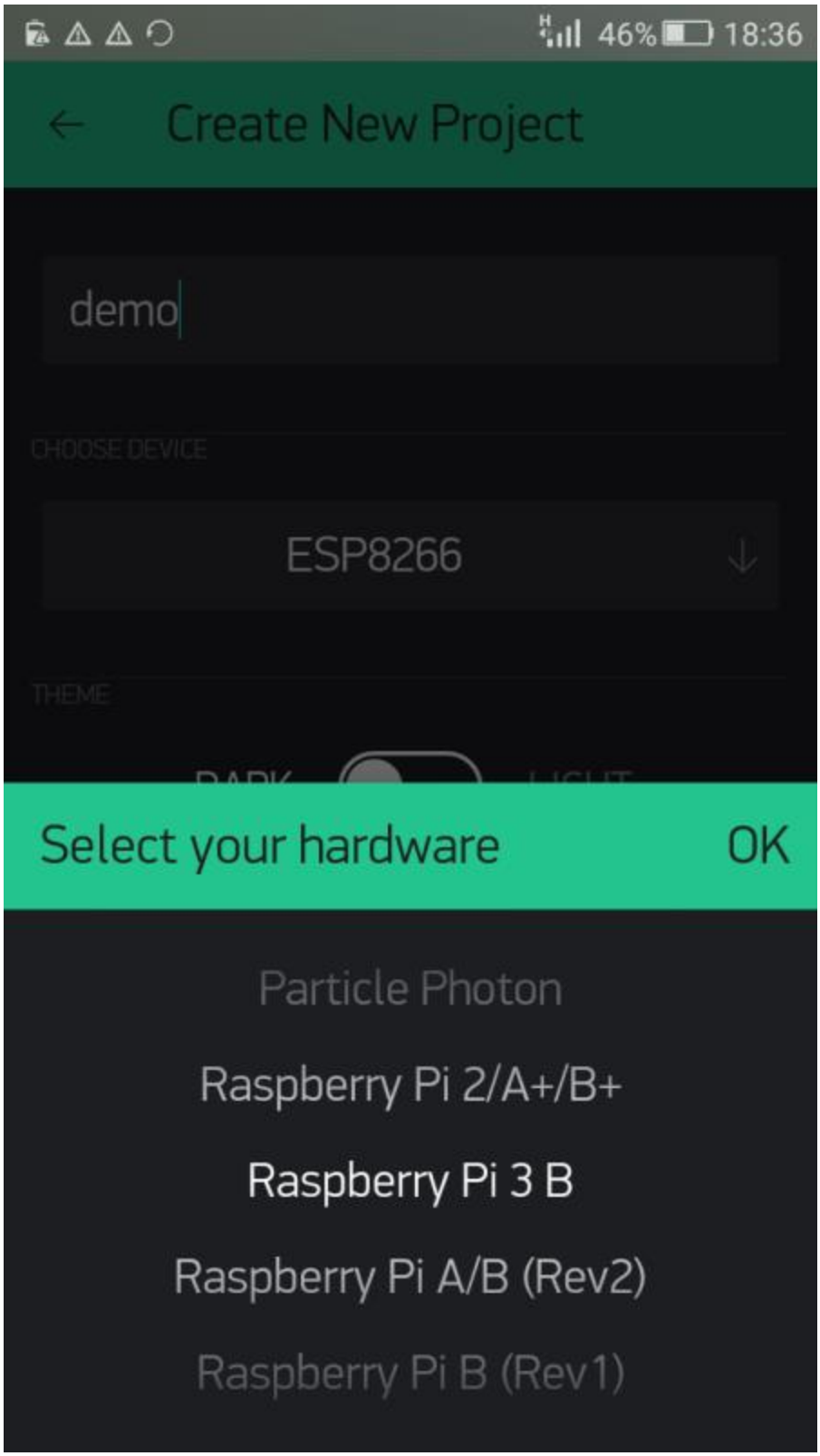

37%
10:17
Create New Account
E-mail
Password
Sign Up
Next

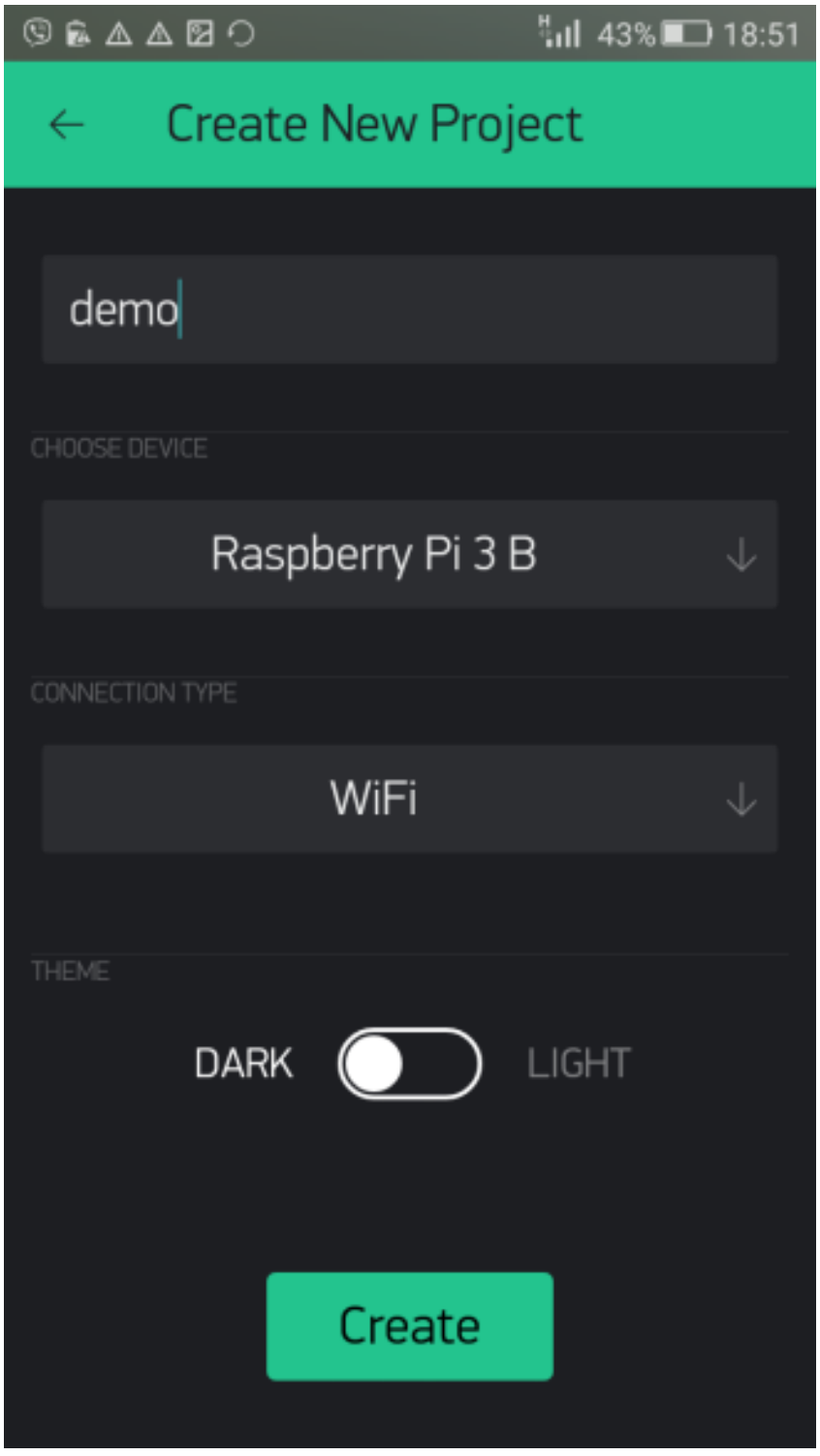

37%
10:17
Create New Account
E-mail
Password
Sign Up
Next

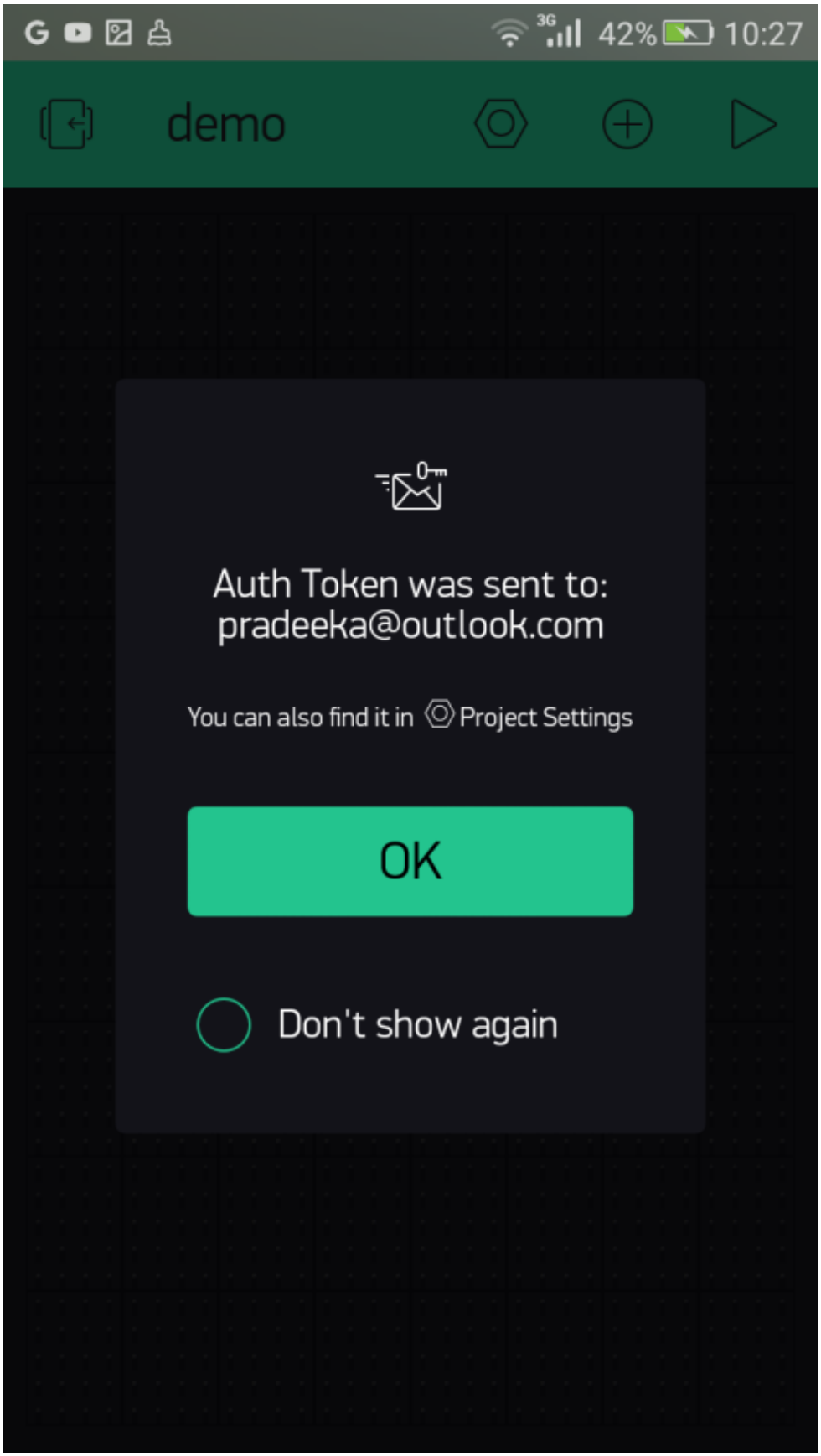

39%
10:22
How energy works
Each widget needs Energy to operate
When you delete a widget Energy is returned
You can always get more Energy in our Store.
Cool! Got it.

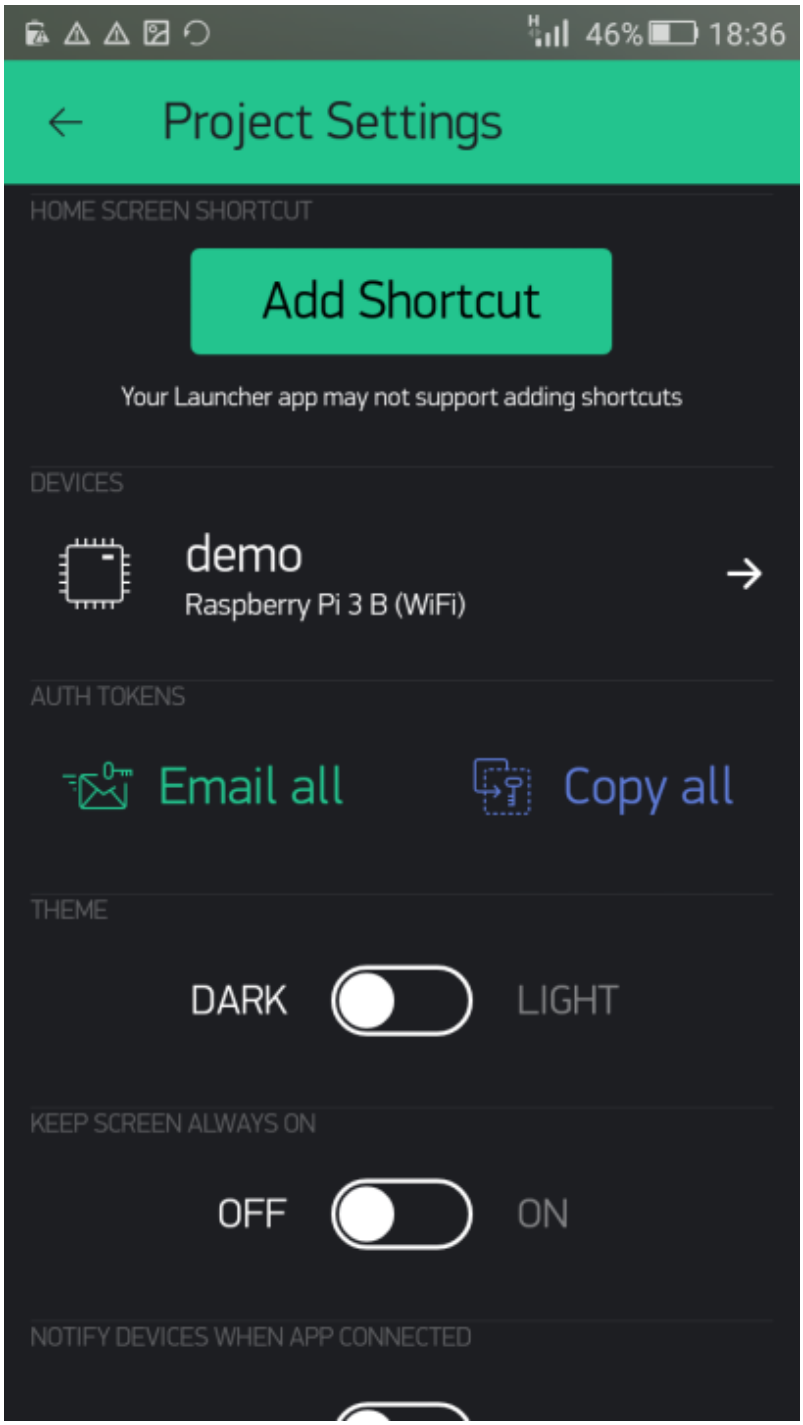

75%
22:11
Blynk
New Project
My Apps
Community

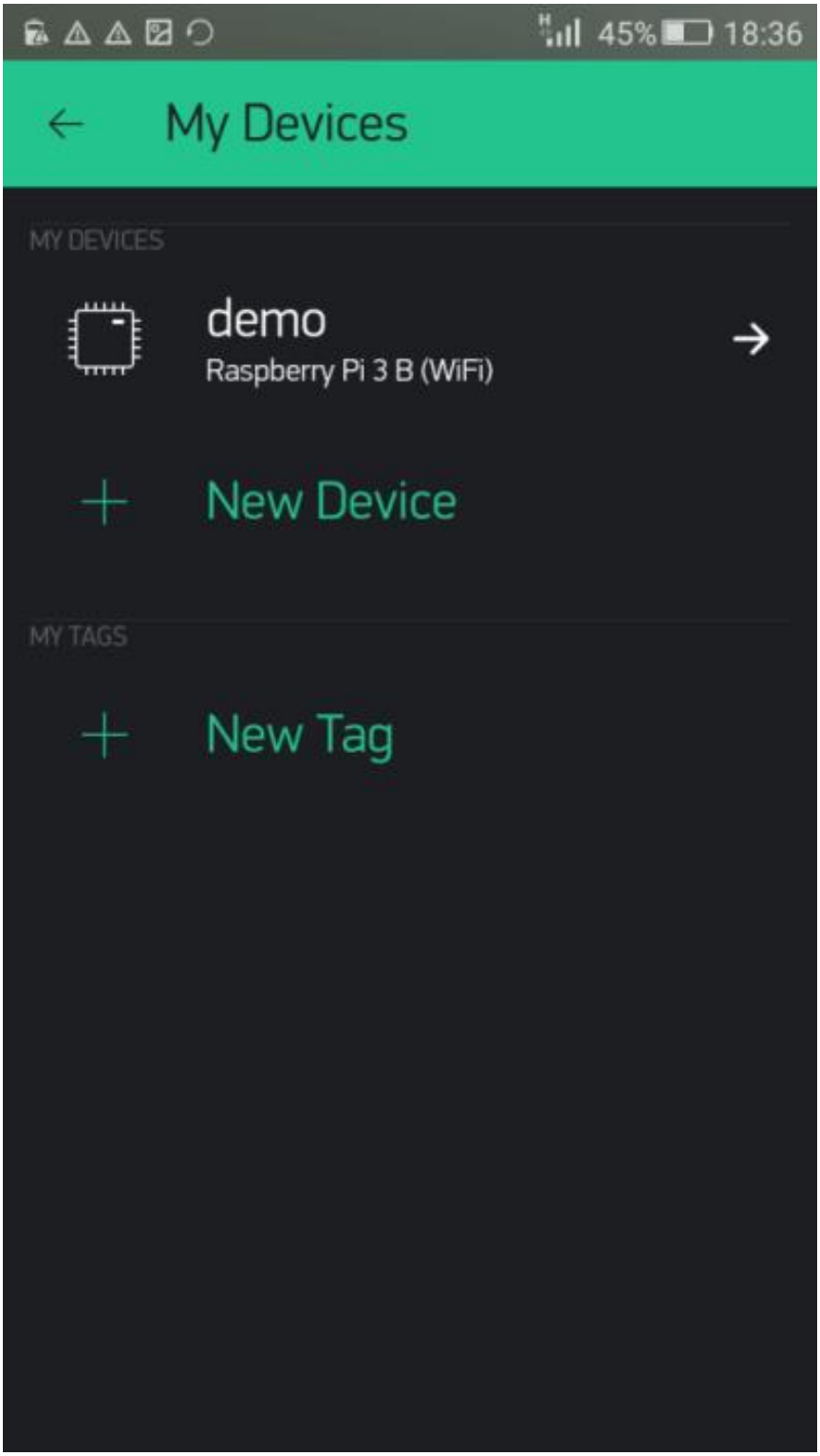

41%
10:25
Create New Project
demo
CHOOSE DEVICE
ESP8266
THEME
DARK
LIGHT
Create

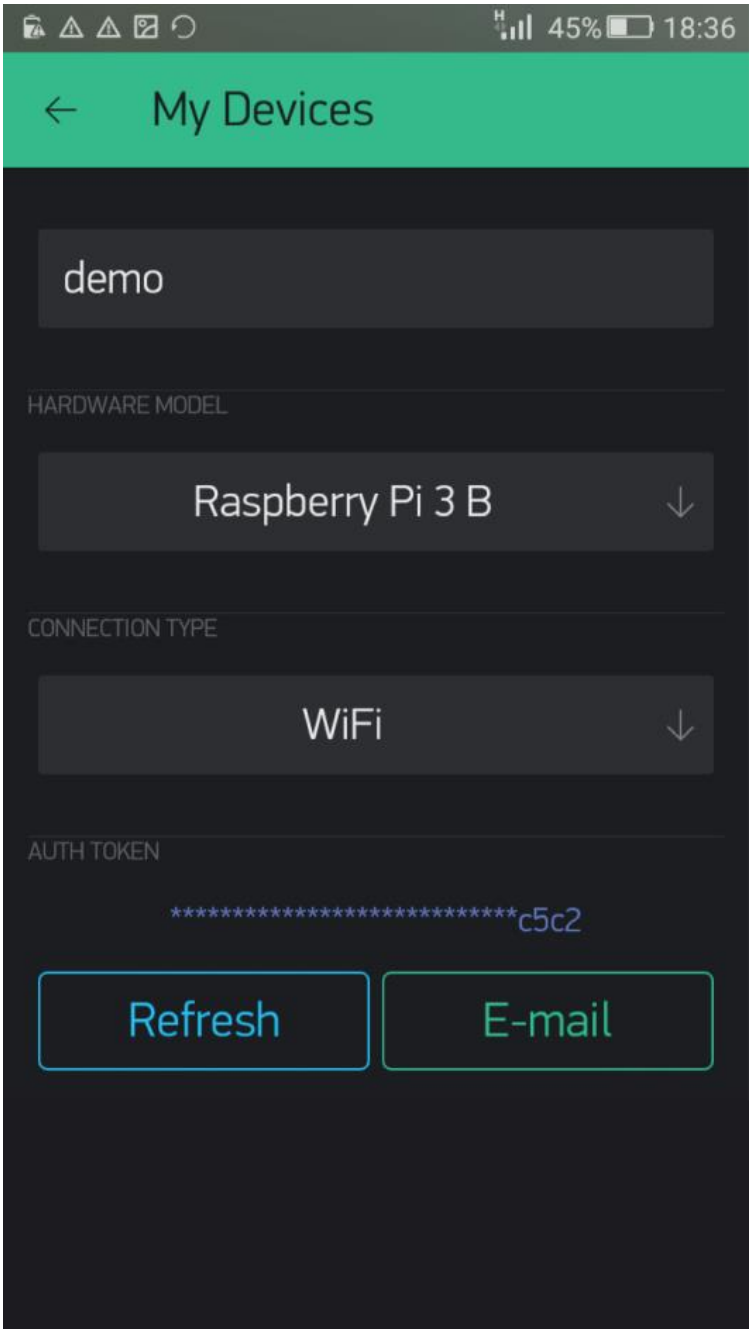

46% 18:36
Create New Project
demo
CHOOSE DEVICE
ESP8266
THEME
Select your hardware
OK
Particle Photon
Raspberry Pi 2/A+/B+
Raspberry Pi 3 B
Raspberry Pi A/B (Rev2)
Raspberry Pi B (Rev1)


43% 18:51
Create New Project
demo
CHOOSE DEVICE
Raspberry Pi 3 B
CONNECTION TYPE
WiFi
THEME
DARK
LIGHT
Create


42%
10:27
demo
Auth Token was sent to:
pradeeka@outlook.com
You can also find it in
Project Settings
OK
Don't show again


46% 18:36
Project Settings
HOME SCREEN SHORTCUT
Add Shortcut
Your Launcher app may not support adding shortcuts
DEVICES
demo
Raspberry Pi 3 B (WiFi)
AUTH TOKENS
Email all
Copy all
THEME
DARK
LIGHT
KEEP SCREEN ALWAYS ON
OFF
ON
NOTIFY DEVICES WHEN APP CONNECTED

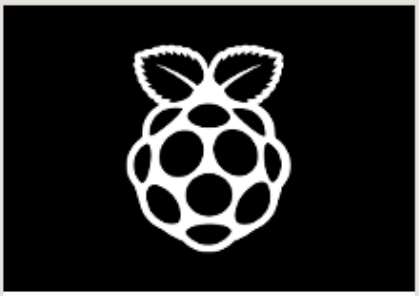

45% 18:36
My Devices
MY DEVICES
demo
Raspberry Pi 3 B (WiFi)
New Device
MY TAGS
New Tag


45% 18:36
My Devices
demo
HARDWARE MODEL
Raspberry Pi 3 B
CONNECTION TYPE
WiFi
AUTH TOKEN
**********c5c2
Refresh
E-mail

BLOG | DOWNLOADS | COMMUNITY | HELP

DOWNLOADS

Raspbian is the Foundation's official supported Operating System. Download it here, or use **NOOBS**, our easy installer for Raspbian and more.



NOOBS

RASPBIAN

BLOG | DOWNLOADS | COMMUNITY | HELP | FORUMS | EDUCATION

Unarchiver (Macintosh). Both are free of charge and have been tested to unzip the image correctly.

RASPBIAN STRETCH WITH DESKTOP

Image with desktop based on Debian Stretch

Version:	November 2017
Release date:	2017-11-29
Kernel version:	4.9
Release notes:	Link

Download Torrent | Download ZIP

SHA-256: 64c4103316efe2a85fd2814f2af16313abac7d4ad68e3d95ae6709e2e894cc1b

RASPBIAN STRETCH LITE

Minimal image based on Debian Stretch

Version:	November 2017
Release date:	2017-11-29
Kernel version:	4.9
Release notes:	Link

Download Torrent | Download ZIP

SHA-256: e942b70072f2e83c446b9de6f202eb8f9692c06e7d92c343361340cc016e0c9f

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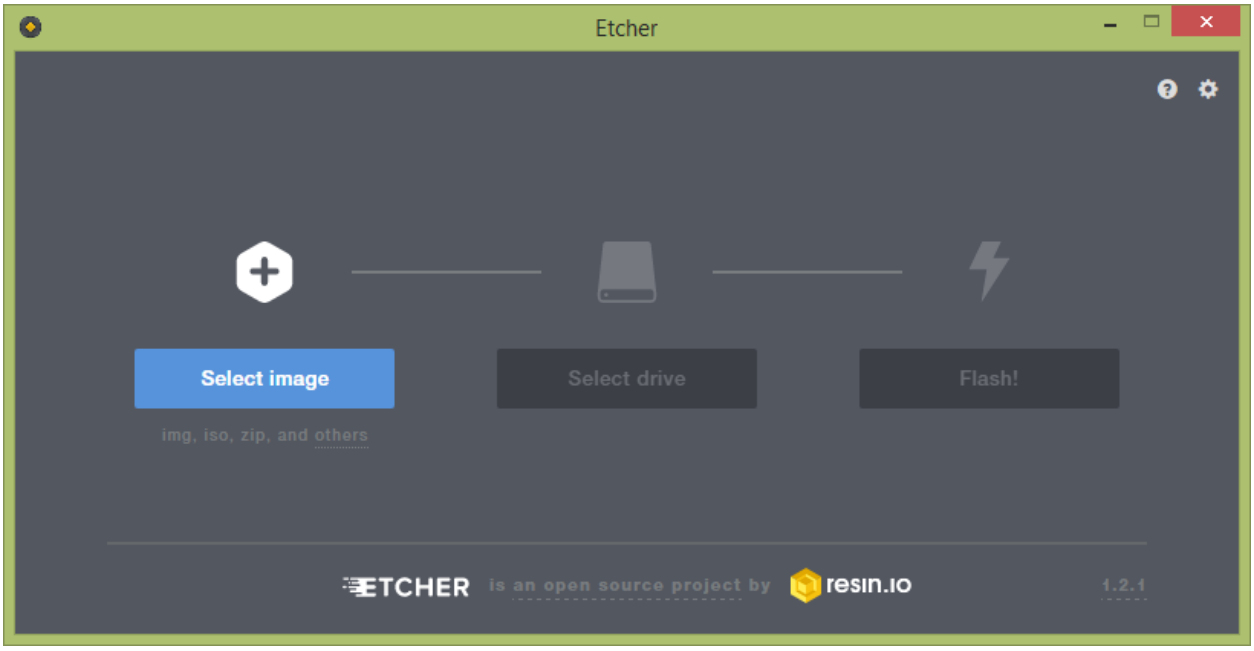
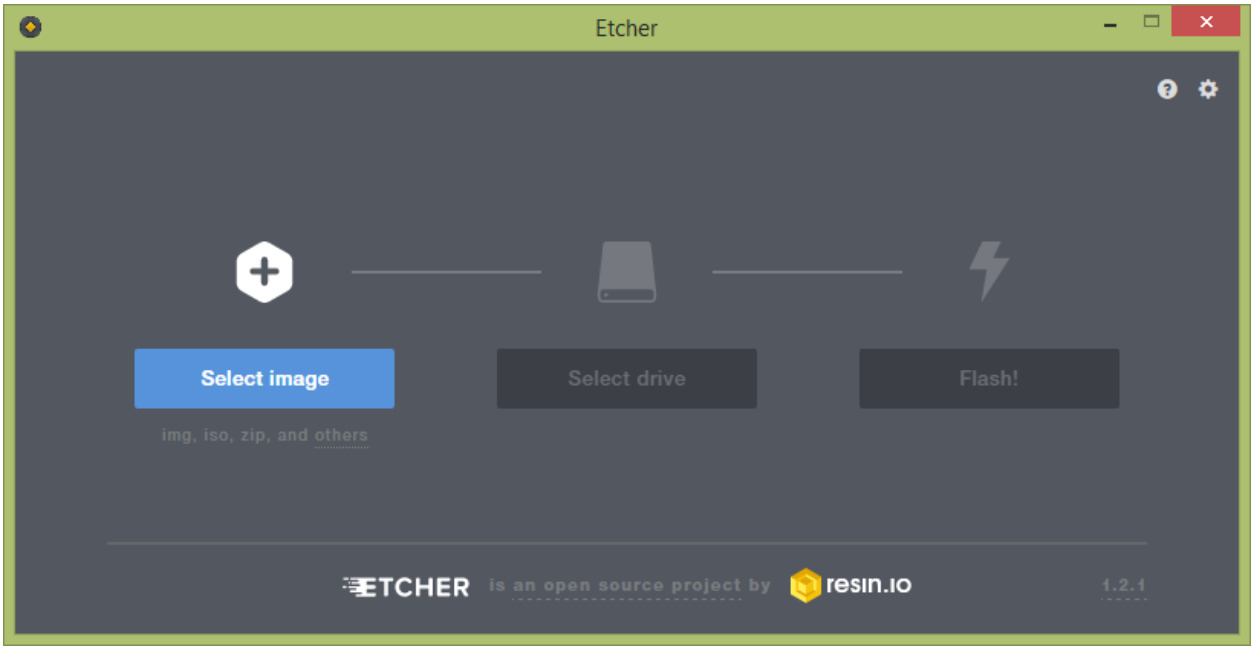
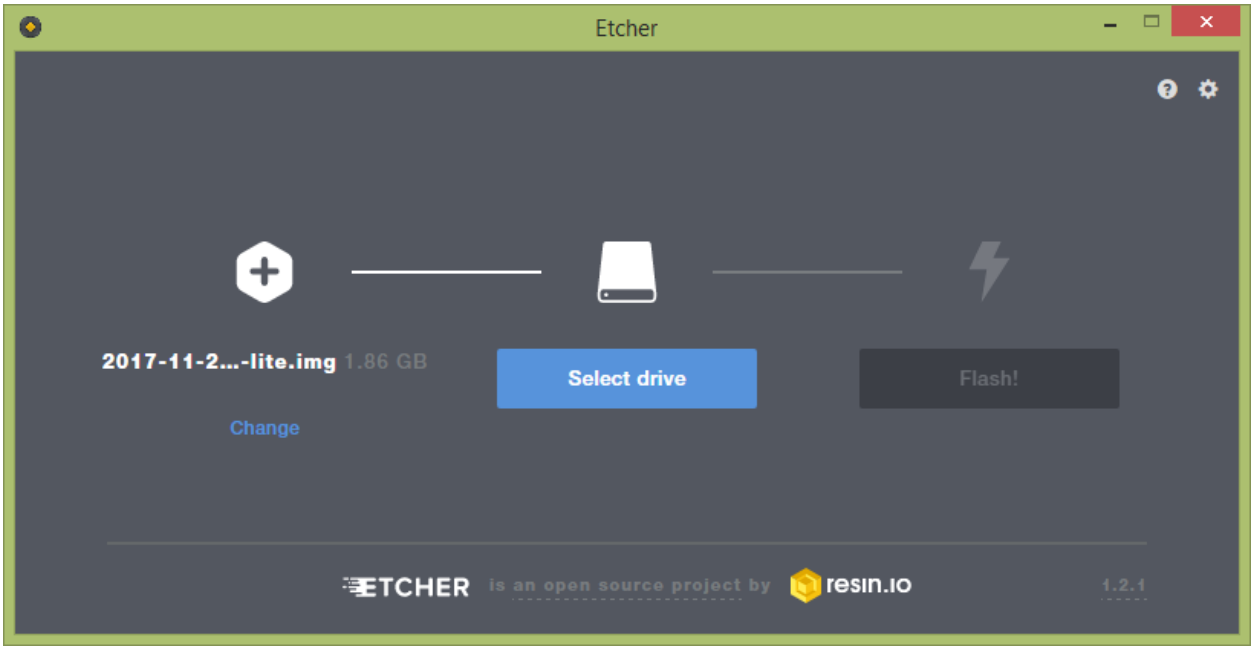
or, use our experimental CLI

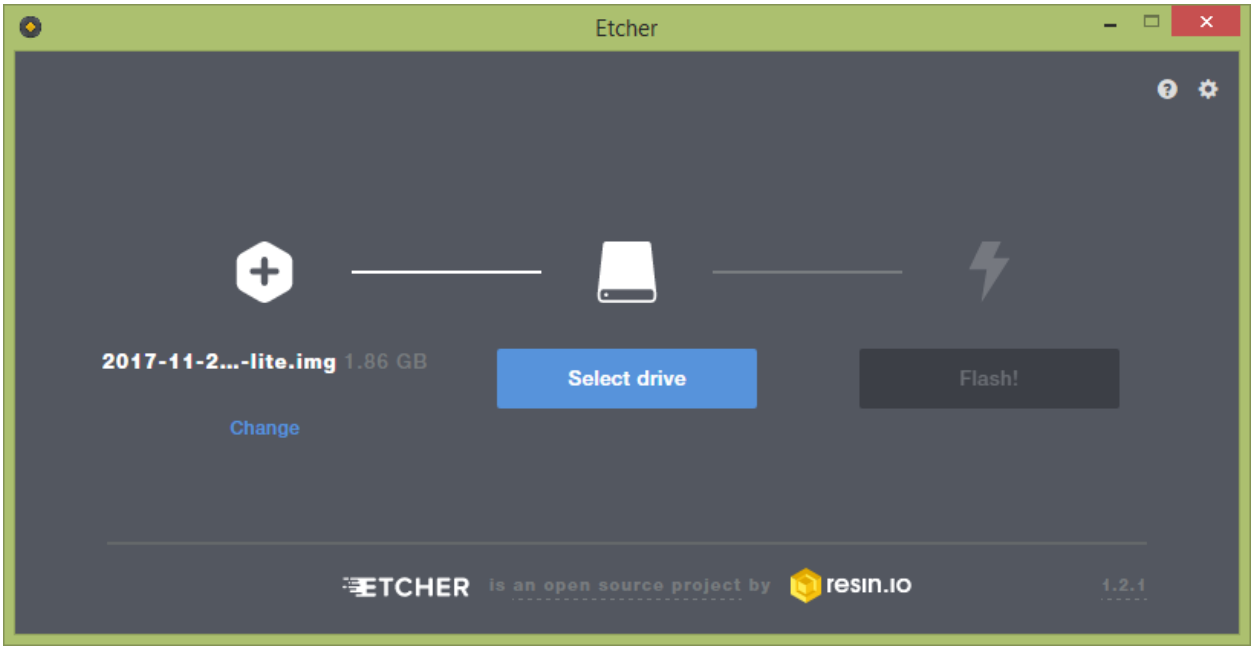
version v1.2.1 - See what's new!

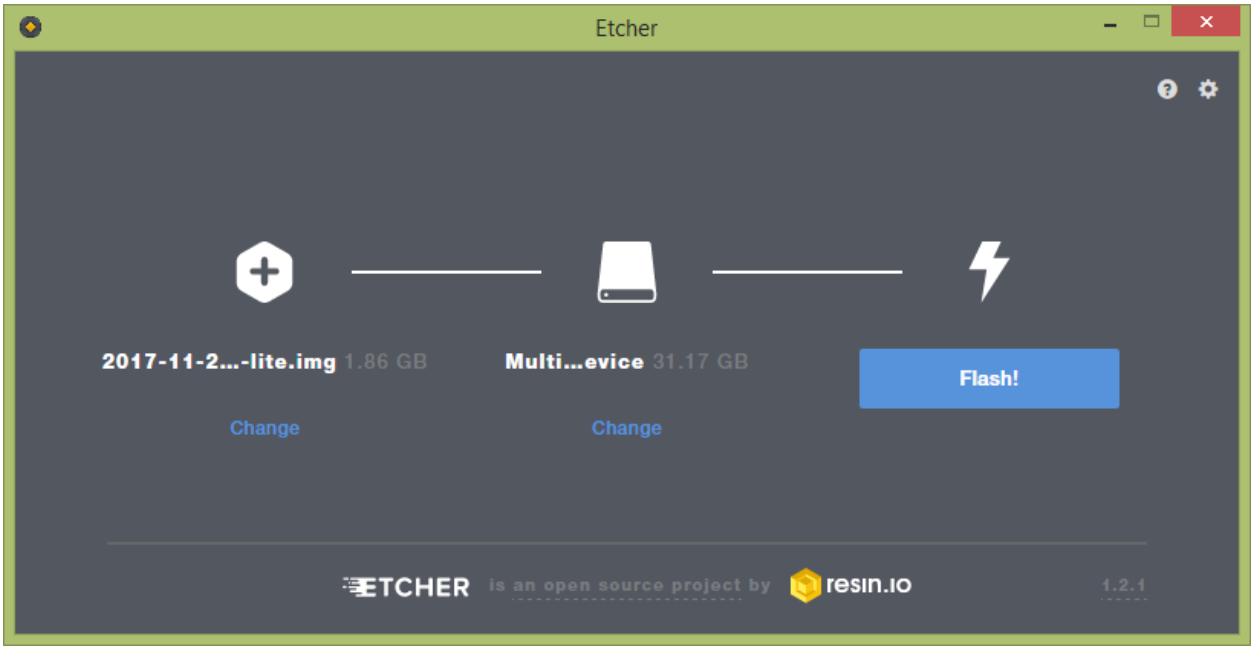
Tweet Star 9,129

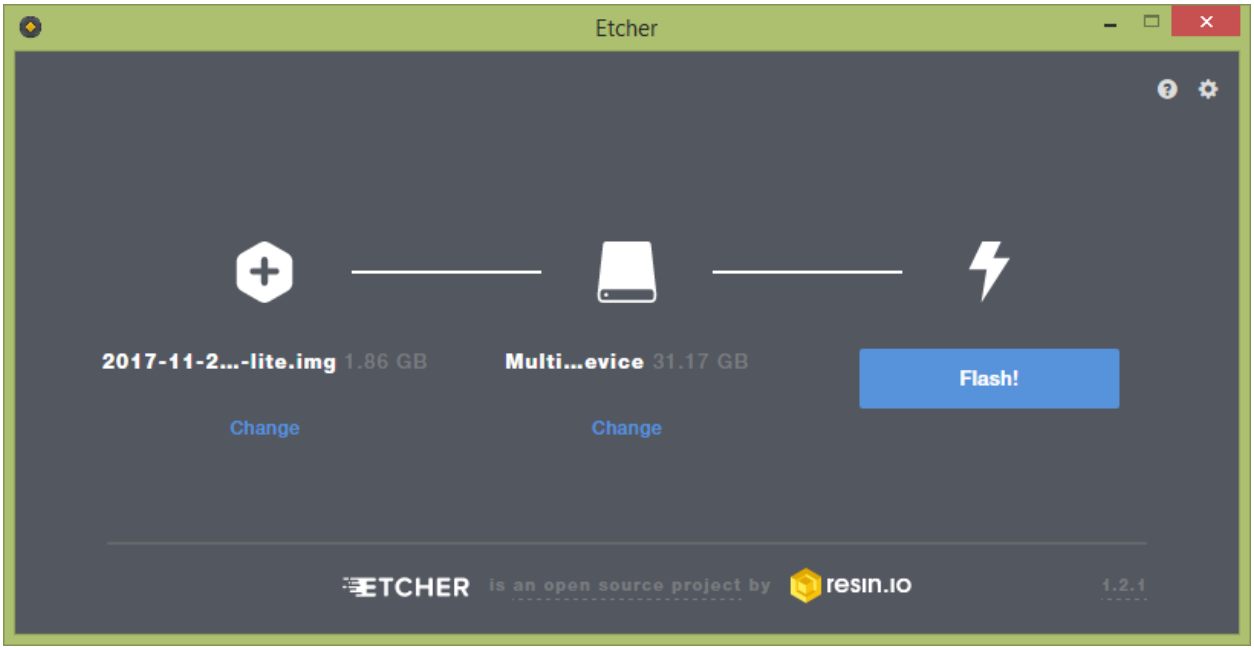


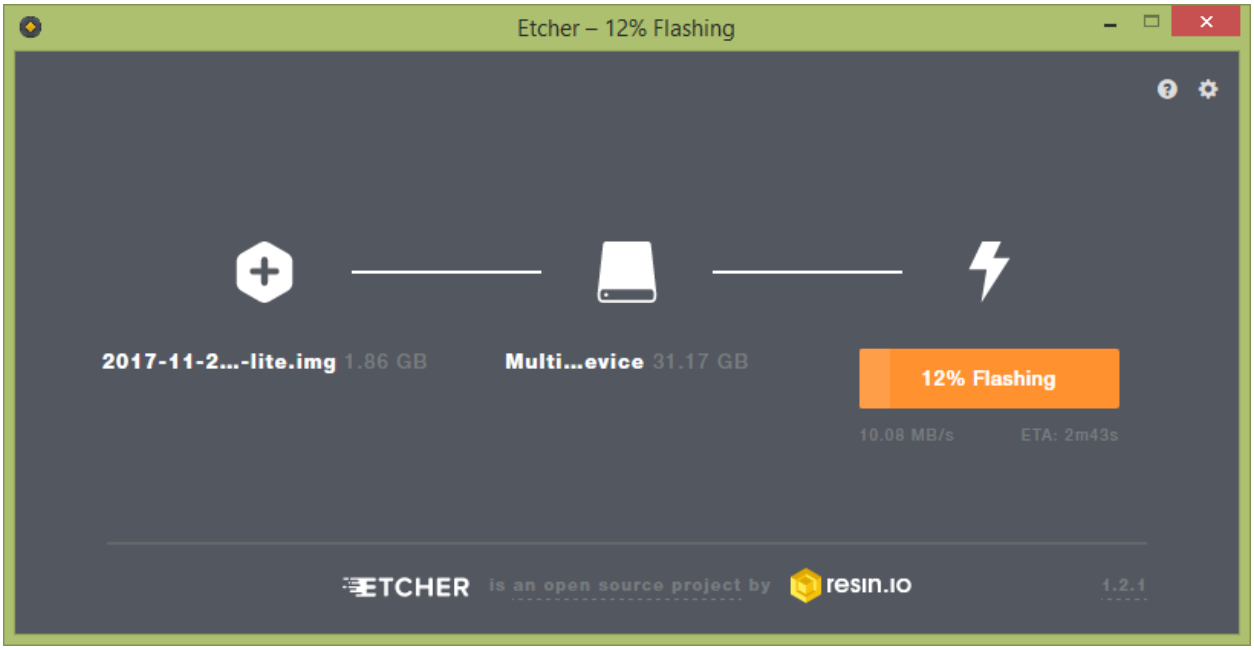

Etcher
Select image
Select drive
Flash!
img, iso, zip, and others
ETCHER is an open source project by resin.io
1.2.1


Etcher
2017-11-2...-lite.img 1.86 GB
Change
Select drive
Flash!
ETCHER is an open source project by resin.io
1.2.1


Etcher
2017-11-2...-lite.img 1.86 GB
Change
Select drive
Flash!
ETCHER is an open source project by resin.io
1.2.1


Etcher
2017-11-2...-lite.img 1.86 GB
Change
Multi...evice 31.17 GB
Change
Flash!
ETCHER is an open source project by resin.io
1.2.1


Etcher
2017-11-2...-lite.img 1.86 GB
Multi...evice 31.17 GB
Flash!
Change
Change
ETCHER is an open source project by resin.io
1.2.1


Etcher – 12% Flashing
2017-11-2...-lite.img 1.86 GB
Multi...evice 31.17 GB
12% Flashing
10.08 MB/s
ETA: 2m43s
ETCHER is an open source project by resin.io
1.2.1

Device List

Index	Computer Name	MAC Address	IP Address	Lease Time	Status	Type	Operation
1	Pradeeka	9C:2A:70:C3:69:3F	192.168.1.2	0 days 12 hours 12 minutes 15 seconds	Active	Wi-Fi	Kick Out
2	raspberrypi	B8:27:EB:2F:02:10	192.168.1.5	0 days 23 hours 57 minutes 5 seconds	Active	Ethernet	Kick Out
3	Unknown	90:23:EC:99:C7:57	192.168.1.3	0 days 22 hours 25 minutes 46 seconds	Inactive	Ethernet	Kick Out
4	android-f545dbea0572d0c9	94:FE:22:65:B3:47	192.168.1.4	0 days 20 hours 45 minutes 26 seconds	Inactive	Ethernet	Kick Out

Device List

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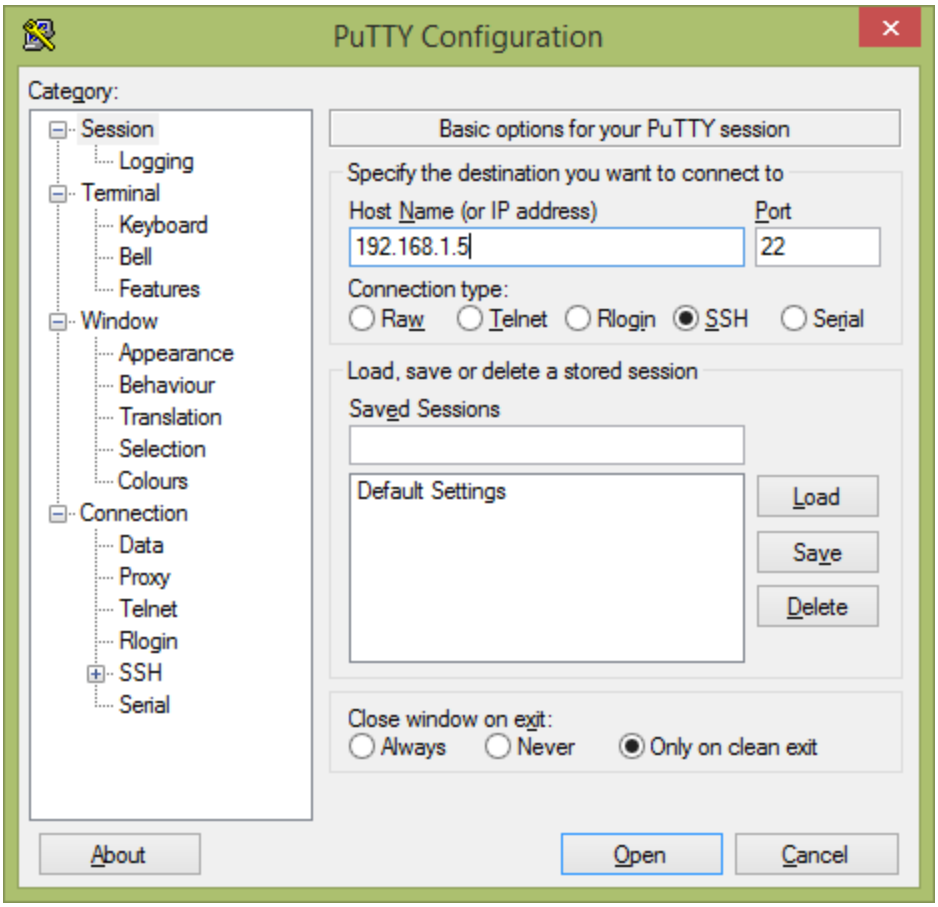
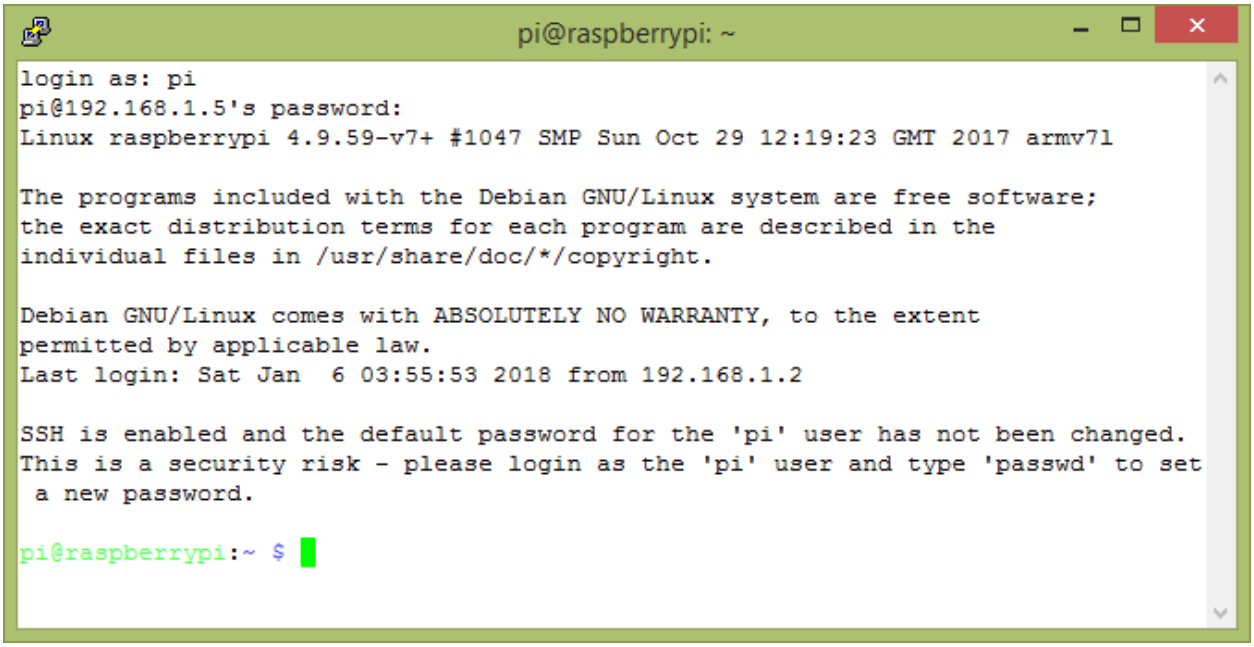
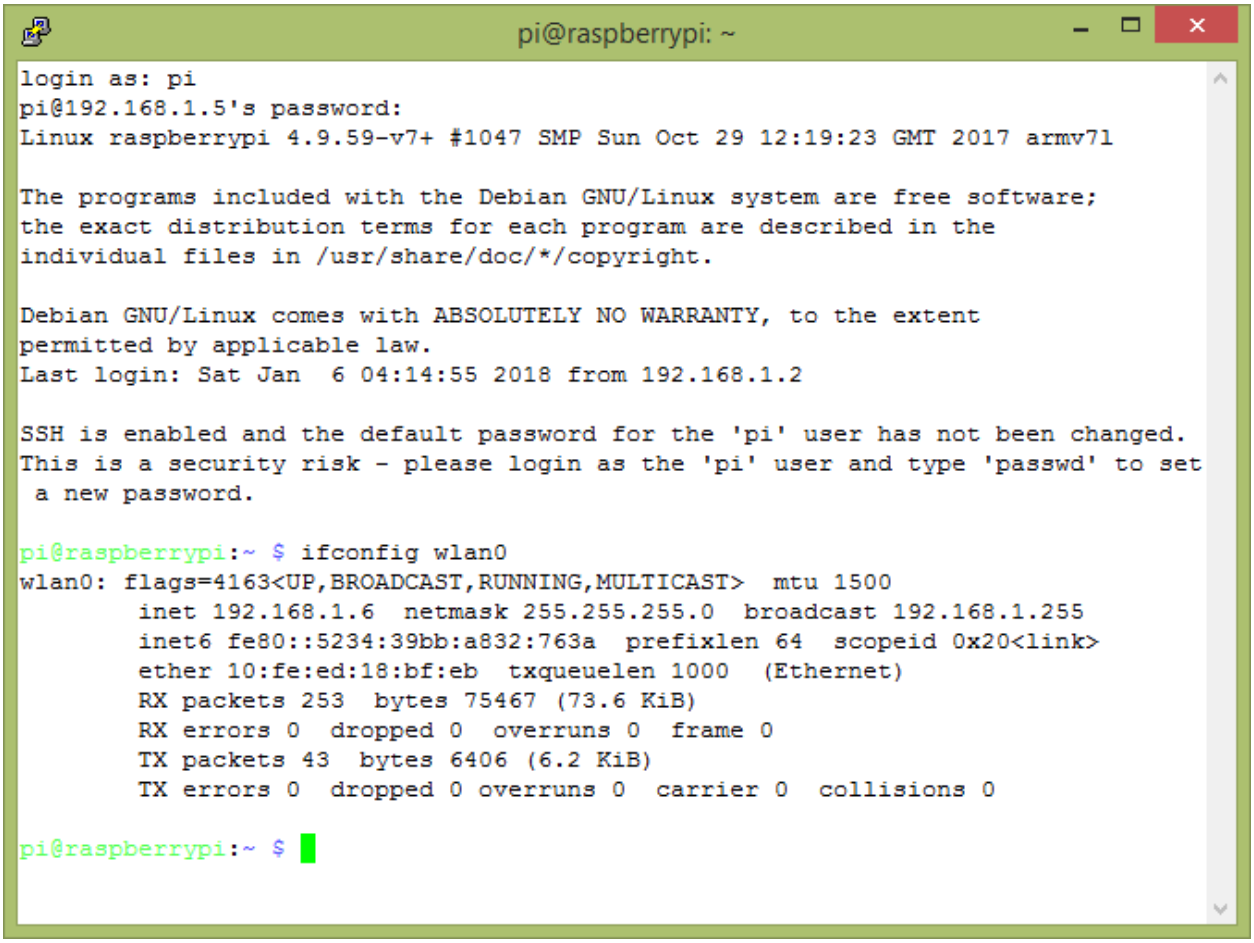
1	Pradeeka	9C:2A:70:C3:69:3F	192.168.1.2	0 days 12 hours 12 minutes 15 seconds	Active	Wi-Fi	Kick Out
2	raspberrypi	B8:27:EB:2F:02:10	192.168.1.5	0 days 23 hours 57 minutes 5 seconds	Active	Ethernet	Kick Out
3	Unknown	90:23:EC:99:C7:57	192.168.1.3	0 days 22 hours 25 minutes 46 seconds	Inactive	Ethernet	Kick Out
4	android-f545dbea0572d0c9	94:FE:22:65:B3:47	192.168.1.4	0 days 20 hours 45 minutes 26 seconds	Inactive	Ethernet	Kick Out

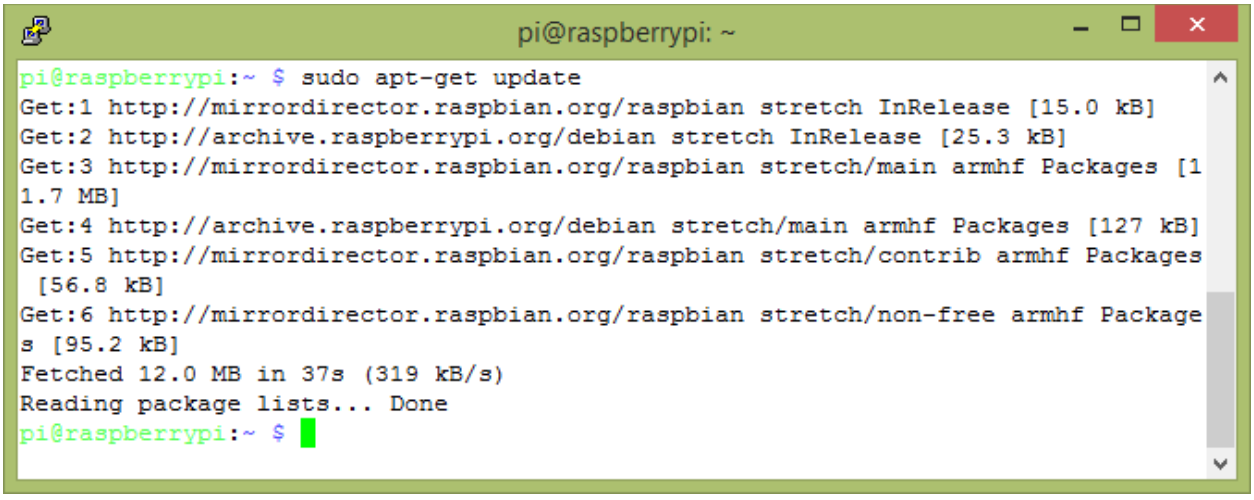

PuTTY Configuration
Category:
Session
Logging
Terminal
Keyboard
Bell
Features
Window
Appearance
Behaviour
Translation
Selection
Colours
Connection
Data
Proxy
Telnet
Rlogin
SSH
Serial
Basic options for your PuTTY session
Specify the destination you want to connect to
Host Name (or IP address)
Port
192.168.1.5
22
Connection type:
Raw
Telnet
Rlogin
SSH
Serial
Load, save or delete a stored session
Saved Sessions
Default Settings
Load
Save
Delete
Close window on exit:
Always
Never
Only on clean exit
About
Open
Cancel

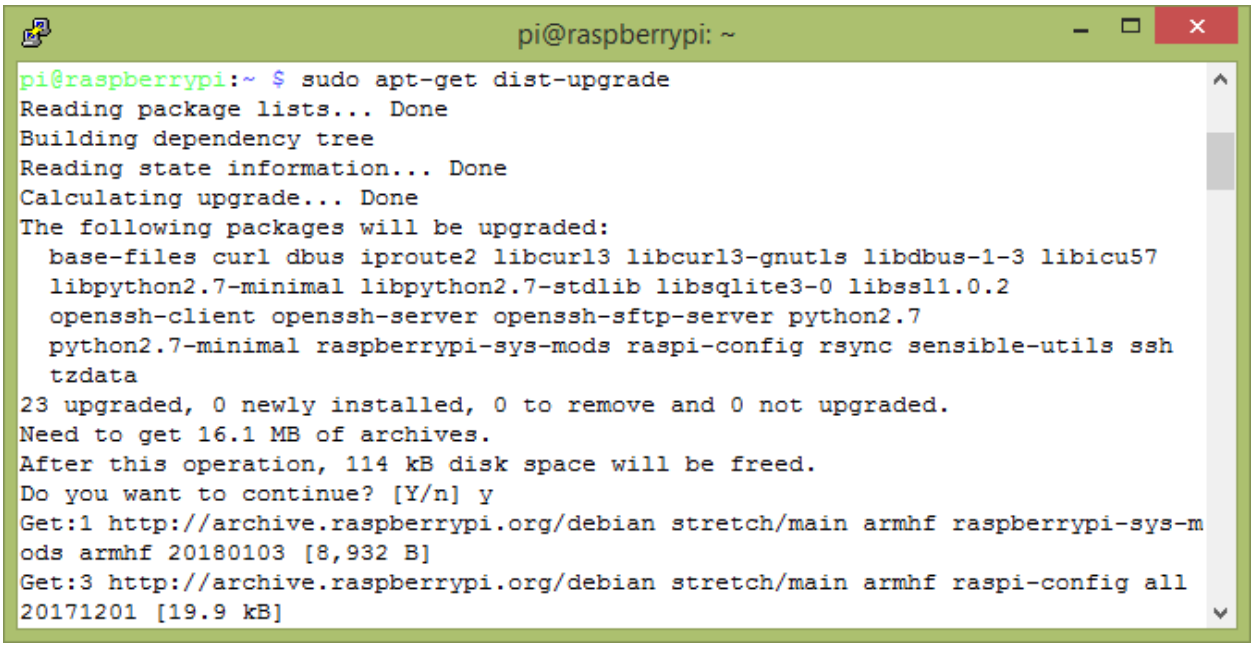

pi@raspberrypi: ~
login as: pi
pi@192.168.1.5's password:
Linux raspberrypi 4.9.59-v7+ #1047 SMP Sun Oct 29 12:19:23 GMT 2017 armv7l
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Sat Jan 6 03:55:53 2018 from 192.168.1.2
SSH is enabled and the default password for the 'pi' user has not been changed.
This is a security risk - please login as the 'pi' user and type 'passwd' to set
a new password.
pi@raspberrypi:~ $

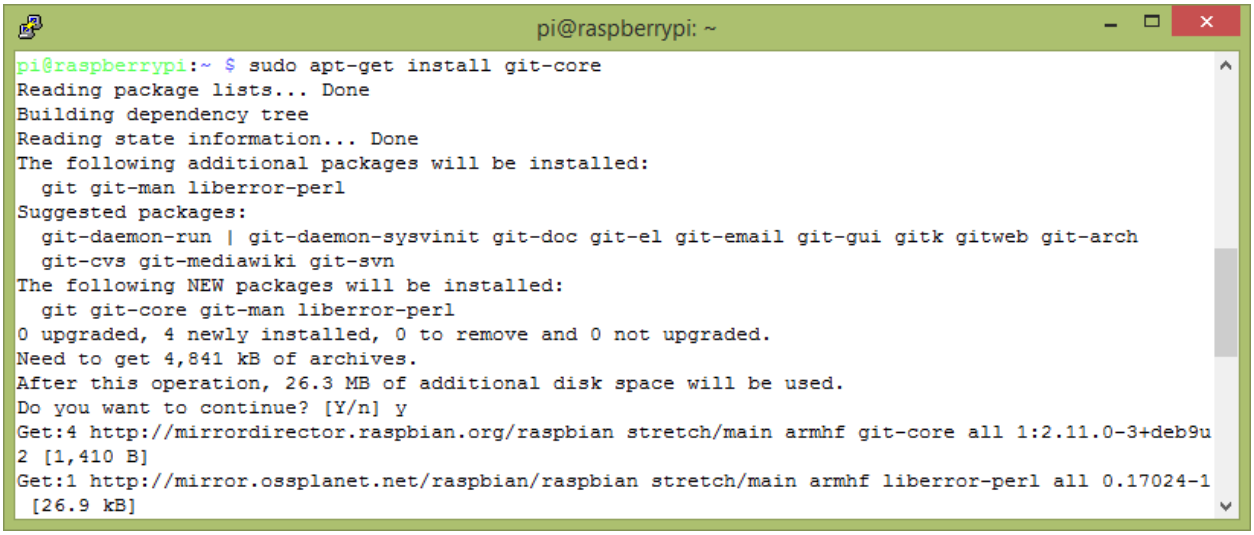

pi@raspberrypi: ~
login as: pi
pi@192.168.1.5's password:
Linux raspberrypi 4.9.59-v7+ #1047 SMP Sun Oct 29 12:19:23 GMT 2017 armv7l
The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.
Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
Last login: Sat Jan 6 04:14:55 2018 from 192.168.1.2
SSH is enabled and the default password for the 'pi' user has not been changed.
This is a security risk - please login as the 'pi' user and type 'passwd' to set
a new password.
pi@raspberrypi:~ $ ifconfig wlan0
wlan0: flags=4163<UP,BROADCAST,RUNNING,MULTICAST> mtu 1500
inet 192.168.1.6 netmask 255.255.255.0 broadcast 192.168.1.255
inet6 fe80::5234:39bb:a832:763a prefixlen 64 scopeid 0x20<link>
ether 10:fe:ed:18:bf:eb txqueuelen 1000 (Ethernet)
RX packets 253 bytes 75467 (73.6 KiB)
RX errors 0 dropped 0 overruns 0 frame 0
TX packets 43 bytes 6406 (6.2 KiB)
TX errors 0 dropped 0 overruns 0 carrier 0 collisions 0
pi@raspberrypi:~ $

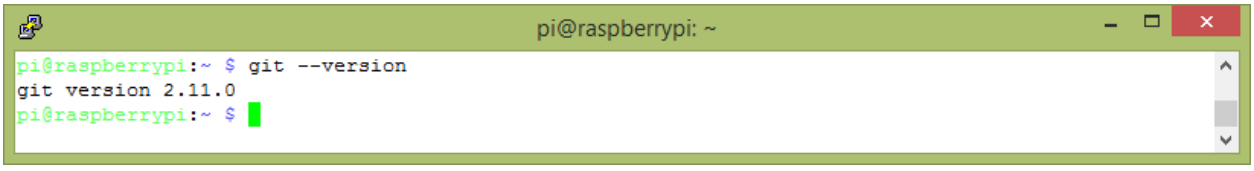
Device List

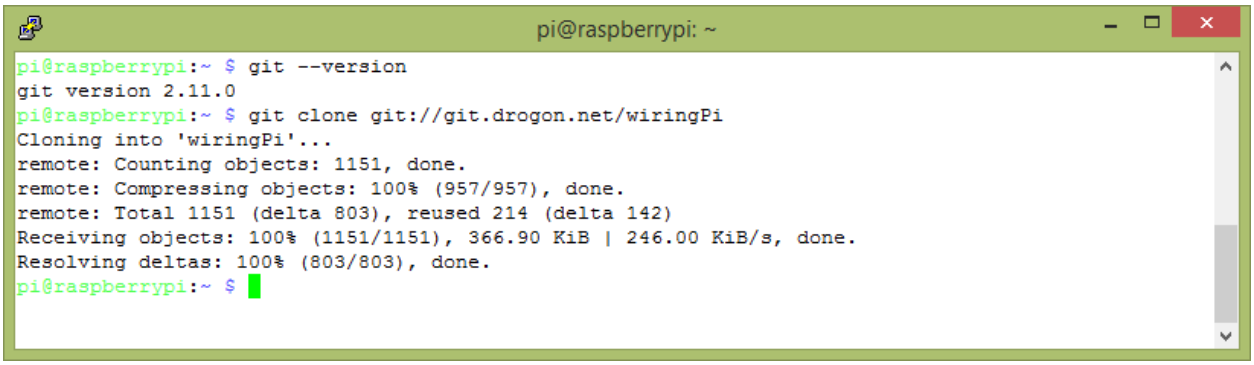
Index	Computer Name	MAC Address	IP Address	Lease Time	Status	Type	Operation
1	Pradeeka	9C:2A:70:C3:69:3F	192.168.1.2	0 days 21 hours 59 minutes 25 seconds	Active	Wi-Fi	Kick Out
2	raspberrypi	B8:27:EB:2F:02:10	192.168.1.5	0 days 22 hours 49 minutes 47 seconds	Active	Ethernet	Kick Out
3	Unknown	90:23:EC:99:C7:57	192.168.1.3	0 days 20 hours 12 minutes 55 seconds	Inactive	Ethernet	Kick Out
4	android-f545dbea0572d0c9	94:FE:22:65:B3:47	192.168.1.4	0 days 18 hours 32 minutes 35 seconds	Inactive	Ethernet	Kick Out
5	raspberrypi	10:FE:ED:18:BF:EB	192.168.1.6	0 days 22 hours 49 minutes 47 seconds	Inactive	Wi-Fi	Kick Out




pi@raspberrypi: ~
pi@raspberrypi:~ $ sudo apt-get dist-upgrade
Reading package lists... Done
Building dependency tree
Reading state information... Done
Calculating upgrade... Done
The following packages will be upgraded:
base-files curl dbus iproute2 libcurl3 libcurl3-gnutls libdbus-1-3 libicu57
libpython2.7-minimal libpython2.7-stdlib libsqlite3-0 libssl1.0.2
openssh-client openssh-server openssh-sftp-server python2.7
python2.7-minimal raspberrypi-sys-mods raspi-config rsync sensible-utils ssh
tzdata
23 upgraded, 0 newly installed, 0 to remove and 0 not upgraded.
Need to get 16.1 MB of archives.
After this operation, 114 kB disk space will be freed.
Do you want to continue? [Y/n] y
Get:1 http://archive.raspberrypi.org/debian stretch/main armhf raspberrypi-sys-m
ods armhf 20180103 [8,932 B]
Get:3 http://archive.raspberrypi.org/debian stretch/main armhf raspi-config all
20171201 [19.9 kB]


pi@raspberrypi: ~
pi@raspberrypi:~ $ sudo apt-get install git-core
Reading package lists... Done
Building dependency tree
Reading state information... Done
The following additional packages will be installed:
git git-man liberror-perl
Suggested packages:
git-daemon-run | git-daemon-sysvinit git-doc git-el git-email git-gui gitk gitweb git-arch
git-cvs git-mediawiki git-svn
The following NEW packages will be installed:
git git-core git-man liberror-perl
0 upgraded, 4 newly installed, 0 to remove and 0 not upgraded.
Need to get 4,841 kB of archives.
After this operation, 26.3 MB of additional disk space will be used.
Do you want to continue? [Y/n] y
Get:4 http://mirrordirector.raspbian.org/raspbian stretch/main armhf git-core all 1:2.11.0-3+deb9u
2 [1,410 B]
Get:1 http://mirror.ossplanet.net/raspbian/raspbian stretch/main armhf liberror-perl all 0.17024-1
[26.9 kB]


pi@raspberrypi: ~
pi@raspberrypi:~ $ git --version
git version 2.11.0
pi@raspberrypi:~ $


pi@raspberrypi: ~
pi@raspberrypi:~ $ git --version
git version 2.11.0
pi@raspberrypi:~ $ git clone git://git.drogon.net/wiringPi
Cloning into 'wiringPi'...
remote: Counting objects: 1151, done.
remote: Compressing objects: 100% (957/957), done.
remote: Total 1151 (delta 803), reused 214 (delta 142)
Receiving objects: 100% (1151/1151), 366.90 KiB | 246.00 KiB/s, done.
Resolving deltas: 100% (803/803), done.
pi@raspberrypi:~ $

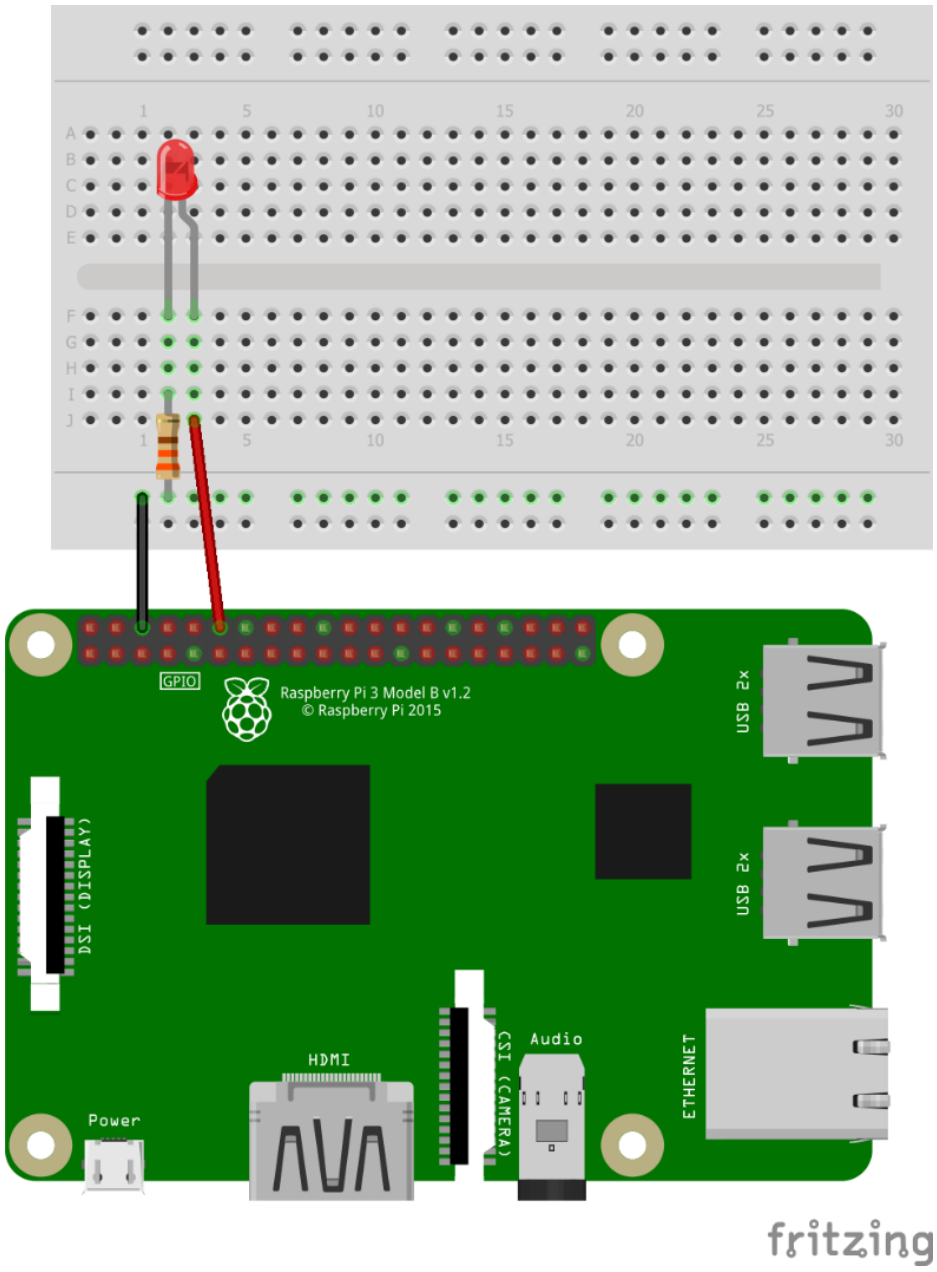
pi@raspberrypi: ~/wiringPi
pi@raspberrypi:~ $ ls
wiringPi
pi@raspberrypi:~ $ clear
pi@raspberrypi:~ $ cd wiringPi
pi@raspberrypi:~/wiringPi $ ./build
wiringPi Build script
=====================
WiringPi Library
[UnInstall]
[Compile] wiringPi.c
[Compile] wiringSerial.c
[Compile] wiringShift.c
[Compile] piHiPri.c
[Compile] piThread.c
[Compile] wiringPiSPI.c
[Compile] wiringPiI2C.c
[Compile] softPwm.c
[Compile] softTone.c
[Compile] mcp23008.c
[Compile] mcp23016.c
[Compile] mcp23017.c
warning: ' ' defined but not used [-Wunused-function]
static void digitalWrite8Dummy (UNU struct wiringPiNodeStruct *node, UNU int pin, UNU int value) { return ; }
warning: ' ' defined but not used [-Wunused-function]
static unsigned int digitalRead8Dummy (UNU struct wiringPiNodeStruct *node, UNU int UNU pin) { return 0 ; }
[Compile] mcp23s08.c

pi@raspberrypi: ~
pi@raspberrypi:~/wiringPi $ cd
pi@raspberrypi:~ $ git clone https://github.com/blynkkk/blynk-library.git
Cloning into 'blynk-library'...
remote: Counting objects: 10548, done.
remote: Total 10548 (delta 0), reused 0 (delta 0), pack-reused 10547
Receiving objects: 100% (10548/10548), 9.02 MiB | 1.33 MiB/s, done.
Resolving deltas: 100% (6535/6535), done.
pi@raspberrypi:~ $

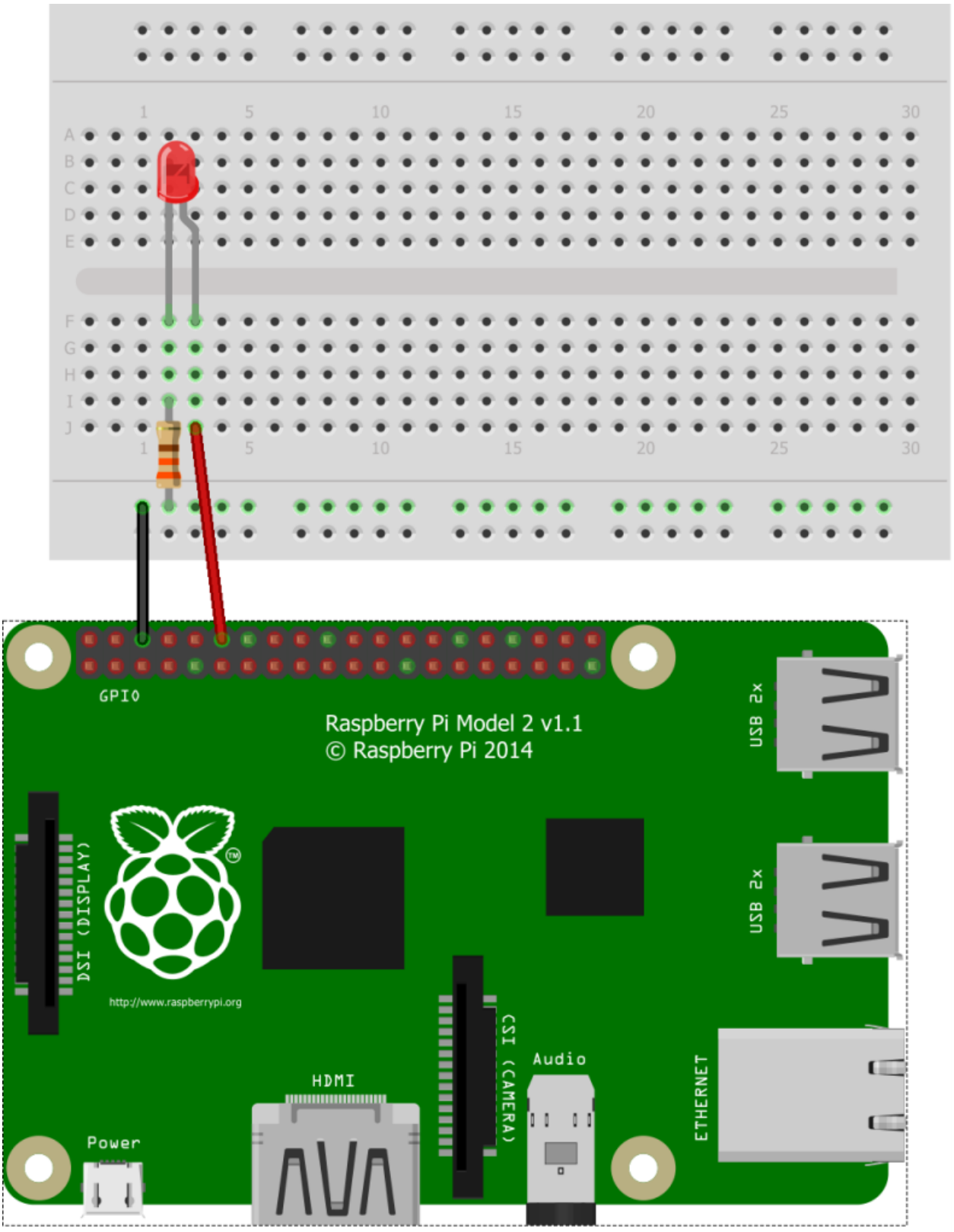
pi@raspberrypi: ~/blynk-library/linux
pi@raspberrypi:~/blynk-library/linux $ make clean all target=raspberry
rm main.o ../src/utility/BlynkDebug.o ../src/utility/BlynkHandlers.o ../src/utility/BlynkTimer.o b
lynk
g++ -I ../src/ -I ./ -DLINUX -c -O3 -w -DRASPBERRY main.cpp -o main.o
g++ -I ../src/ -I ./ -DLINUX -c -O3 -w -DRASPBERRY ../src/utility/BlynkDebug.cpp -o ../src/utility
/BlynkDebug.o
g++ -I ../src/ -I ./ -DLINUX -c -O3 -w -DRASPBERRY ../src/utility/BlynkHandlers.cpp -o ../src/util
ity/BlynkHandlers.o
g++ -I ../src/ -I ./ -DLINUX -c -O3 -w -DRASPBERRY ../src/utility/BlynkTimer.cpp -o ../src/utility
/BlynkTimer.o
g++ main.o ../src/utility/BlynkDebug.o ../src/utility/BlynkHandlers.o ../src/utility/BlynkTimer.o
-lrt -lpthread -s -lwiringPi -o blynk

pi@raspberrypi: ~/blynk-library/linux
pi@raspberrypi:~/blynk-library/linux $ sudo ./blynk --token=da999e8ef4ac42148f9fe8427d482451
[0]
v0.5.0 on Linux
[1] Connecting to blynk-cloud.com:8442
[3434] Ready (ping: 101ms).

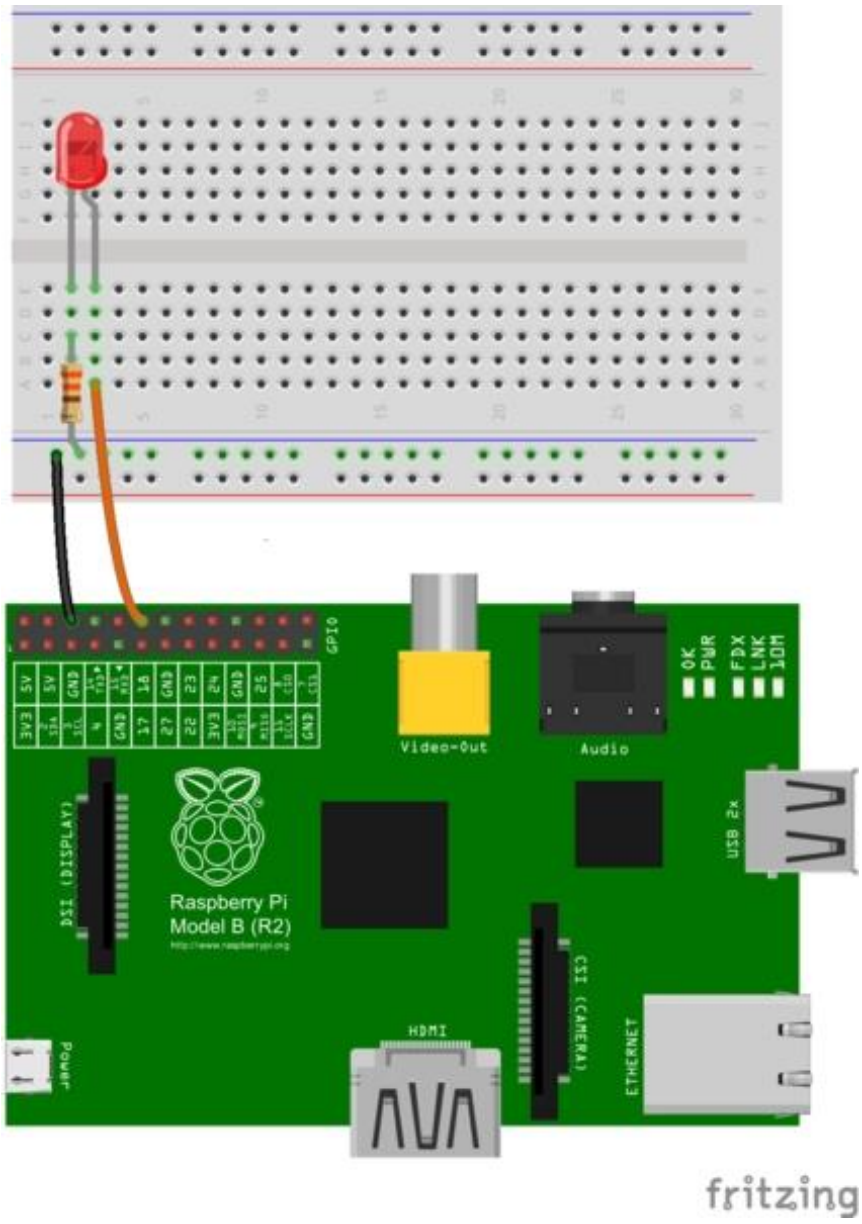
Chapter 2: Building Your First Blynk Application



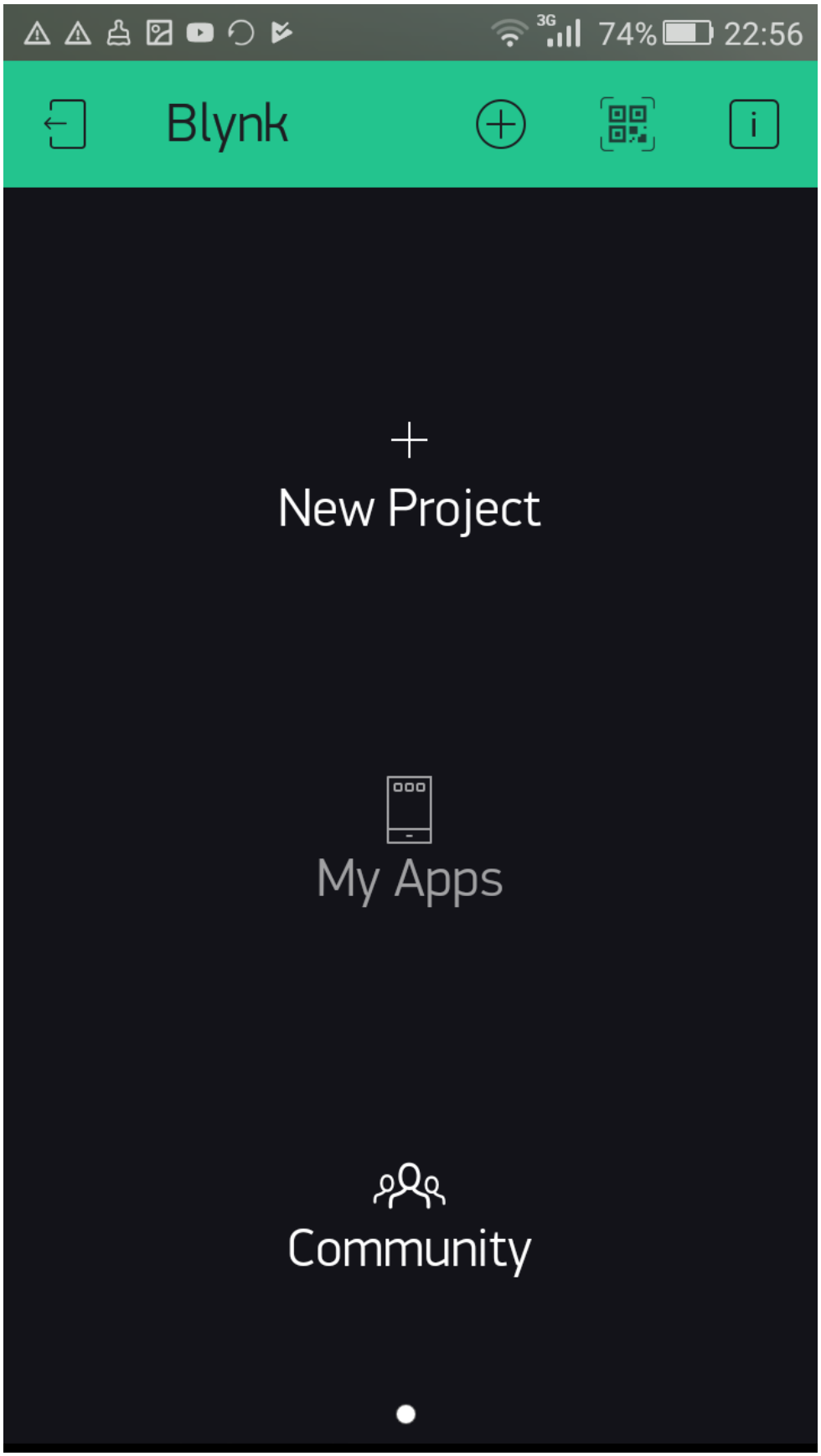
```
pi@raspberrypi:~ $ gpio readall
 +-----+-----+---------+------+---+---Pi 3---+---+------+---------+-----+-----+
 | BCM | wPi |   Name  | Mode | V | Physical | V | Mode | Name    | wPi | BCM |
 +-----+-----+---------+------+---+----++----+---+------+---------+-----+-----+
 |     |     |    3.3v |      |   |  1 || 2  |   |      | 5v      |     |     |
 |   2 |   8 |   SDA.1 | ALT0 | 1 |  3 || 4  |   |      | 5V      |     |     |
 |   3 |   9 |   SCL.1 | ALT0 | 1 |  5 || 6  |   |      | 0v      |     |     |
 |   4 |   7 | GPIO. 7 |   IN | 0 |  7 || 8  | 1 | IN   | TxD     | 15  | 14  |
 |     |     |      0v |      |   |  9 || 10 | 1 | IN   | RxD     | 16  | 15  |
 |  17 |   0 | GPIO. 0 |   IN | 0 | 11 || 12 | 0 | IN   | GPIO. 1 | 1   | 18  |
 |  27 |   2 | GPIO. 2 |   IN | 0 | 13 || 14 |   |      | 0v      |     |     |
 |  22 |   3 | GPIO. 3 |   IN | 0 | 15 || 16 | 0 | IN   | GPIO. 4 | 4   | 23  |
 |     |     |    3.3v |      |   | 17 || 18 | 0 | IN   | GPIO. 5 | 5   | 24  |
 |  10 |  12 |    MOSI | ALT0 | 1 | 19 || 20 |   |      | 0v      |     |     |
 |   9 |  13 |    MISO | ALT0 | 1 | 21 || 22 | 0 | IN   | GPIO. 6 | 6   | 25  |
 |  11 |  14 |    SCLK | ALT0 | 0 | 23 || 24 | 1 | OUT  | CE0     | 10  | 8   |
 |     |     |      0v |      |   | 25 || 26 | 1 | OUT  | CE1     | 11  | 7   |
 |   0 |  30 |   SDA.0 |   IN | 1 | 27 || 28 | 1 | OUT  | SCL.0   | 31  | 1   |
 |   5 |  21 | GPIO.21 |   IN | 0 | 29 || 30 |   |      | 0v      |     |     |
 |   6 |  22 | GPIO.22 |   IN | 0 | 31 || 32 | 0 | IN   | GPIO.26 | 26  | 12  |
 |  13 |  23 | GPIO.23 |   IN | 1 | 33 || 34 |   |      | 0v      |     |     |
 |  19 |  24 | GPIO.24 |   IN | 0 | 35 || 36 | 0 | IN   | GPIO.27 | 27  | 16  |
 |  26 |  25 | GPIO.25 |   IN | 0 | 37 || 38 | 0 | IN   | GPIO.28 | 28  | 20  |
 |     |     |      0v |      |   | 39 || 40 | 0 | IN   | GPIO.29 | 29  | 21  |
 +-----+-----+---------+------+---+----++----+---+------+---------+-----+-----+
 | BCM | wPi |   Name  | Mode | V | Physical | V | Mode | Name    | wPi | BCM |
 +-----+-----+---------+------+---+---Pi 3---+---+------+---------+-----+-----+
```

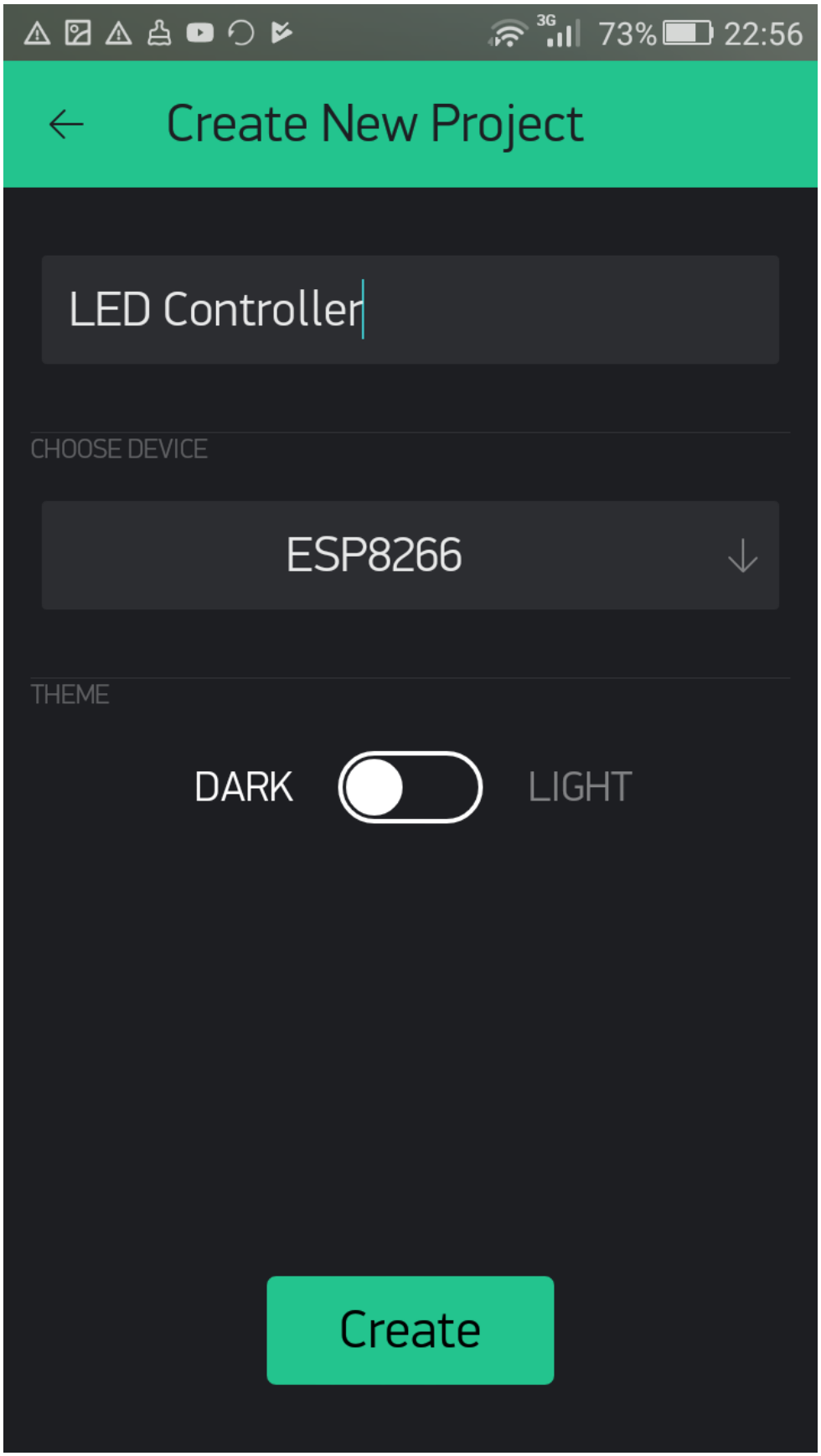

GPIO
Raspberry Pi Model 2 v1.1
© Raspberry Pi 2014
USB 2x
USB 2x
DSI (DISPLAY)
http://www.raspberrypi.org
CSI (CAMERA)
Audio
ETHERNET
HDMI
Power
fritzing

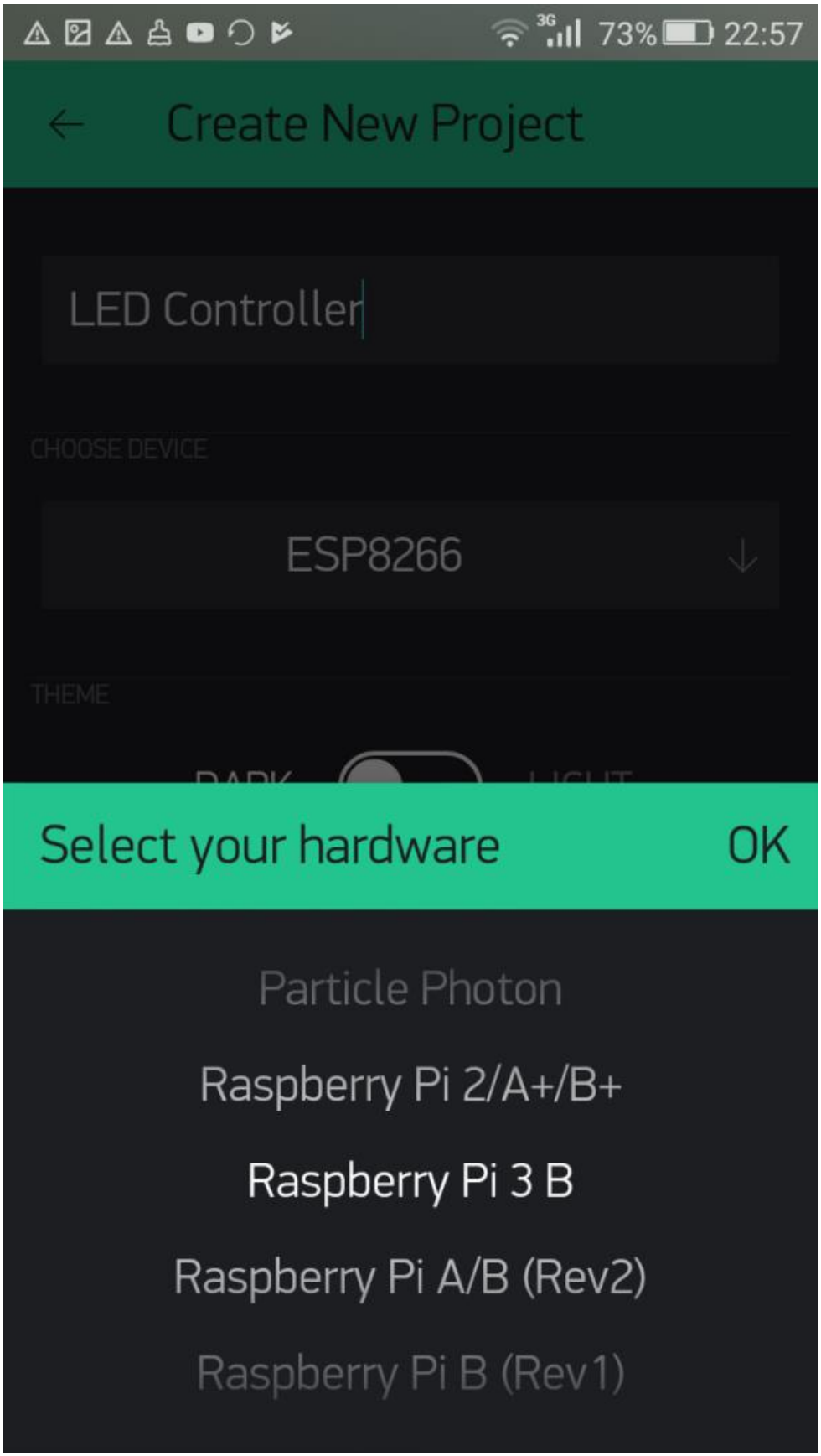
BCM	wPi	Name	Mode	V	Physical	V	Mode	Name	wPi	BCM
		3.3v			1 || 2			5v		
2	8	SDA.1	ALTO	1	3 || 4			5V		
3	9	SCL.1	ALTO	1	5 || 6			0v		
4	7	GPIO. 7	IN	1	7 || 8	1	ALTO	TxD	15	14
		0v			9 || 10	1	ALTO	RxD	16	15
17	0	GPIO. 0	IN	0	11 || 12	0	IN	GPIO. 1	1	18
27	2	GPIO. 2	OUT	0	13 || 14			0v		
22	3	GPIO. 3	OUT	0	15 || 16	1	OUT	GPIO. 4	4	23
		3.3v			17 || 18	0	IN	GPIO. 5	5	24
10	12	MOSI	IN	0	19 || 20			0v		
9	13	MISO	IN	0	21 || 22	0	IN	GPIO. 6	6	25
11	14	SCLK	IN	0	23 || 24	1	IN	CE0	10	8
		0v			25 || 26	1	IN	CE1	11	7
0	30	SDA.0	IN	1	27 || 28	1	IN	SCL.0	31	1
5	21	GPIO.21	OUT	0	29 || 30			0v		
6	22	GPIO.22	IN	1	31 || 32	1	IN	GPIO.26	26	12
13	23	GPIO.23	IN	0	33 || 34			0v		
19	24	GPIO.24	IN	0	35 || 36	0	IN	GPIO.27	27	16
26	25	GPIO.25	IN	0	37 || 38	0	IN	GPIO.28	28	20
		0v			39 || 40	1	IN	GPIO.29	29	21
BCM	wPi	Name	Mode	V	Physical	V	Mode	Name	wPi	BCM

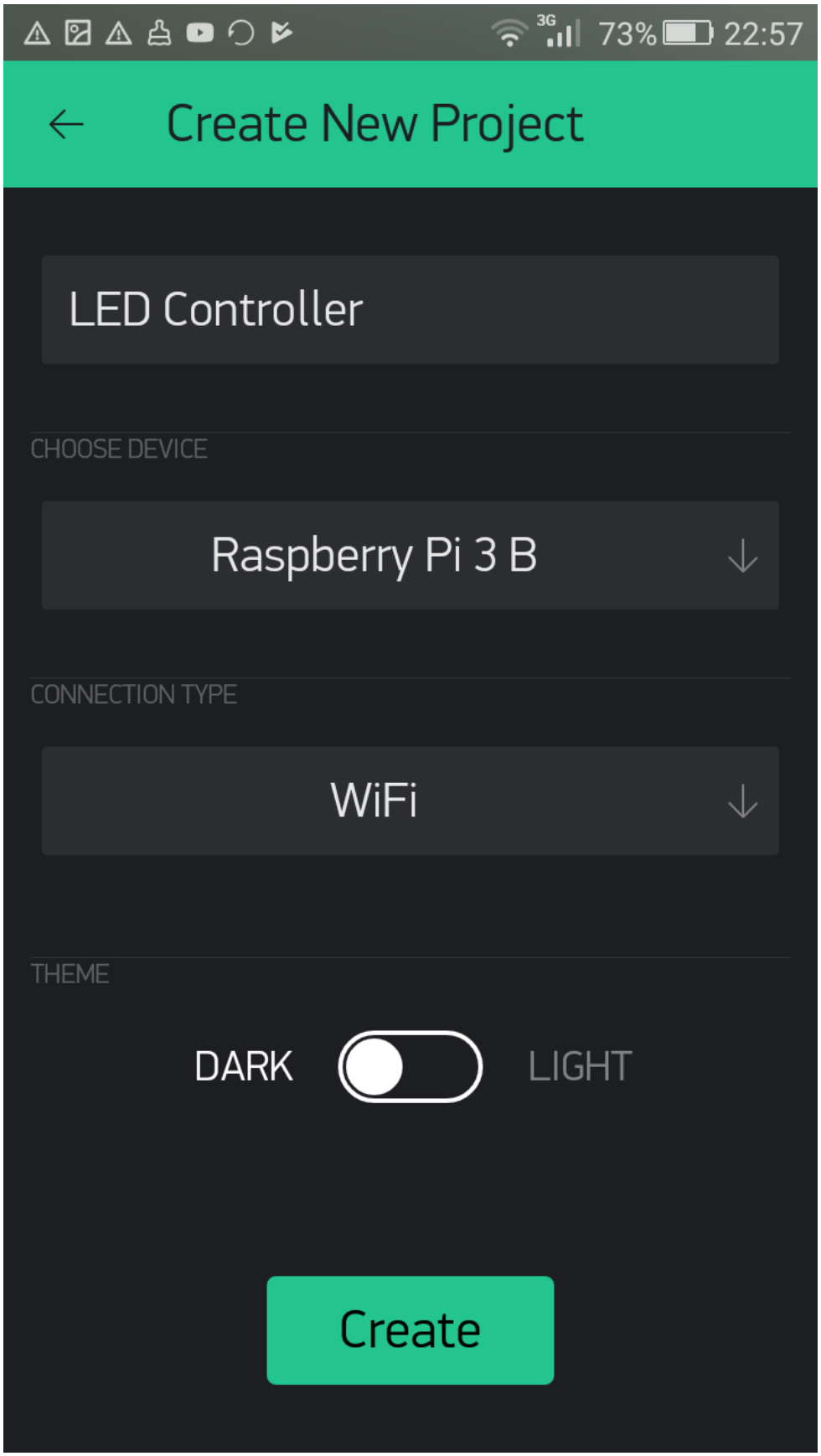

GPIO
Video-Out
Audio
OK
PWR
FDX
LNK
100
USB 2x
DSI (DISPLAY)
Raspberry Pi
Model B (R2)
CSI (CAMERA)
HDMI
ETHERNET
POWER
fritzing

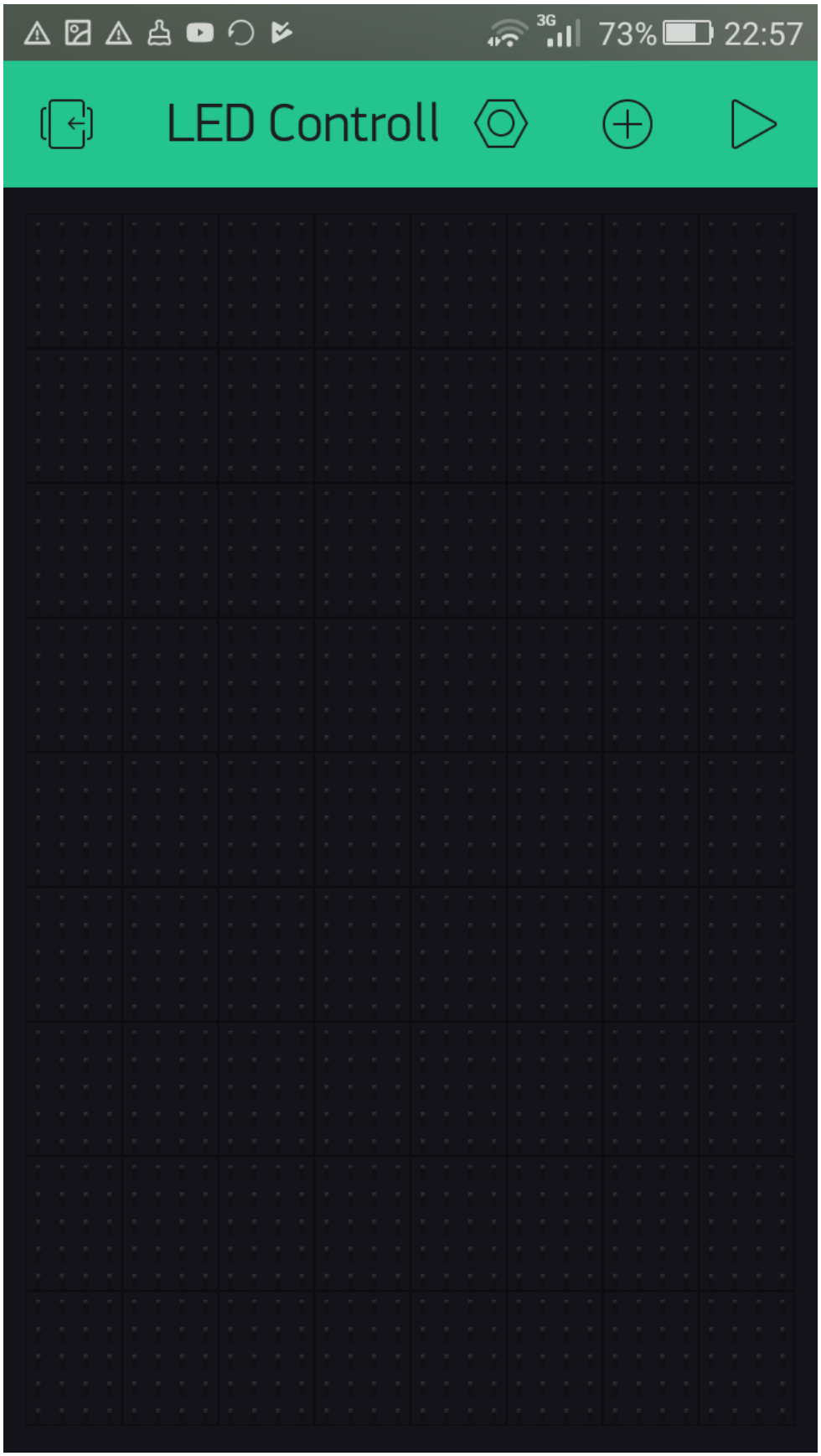
```
pi@raspberrypi ~ $ gpio readall
 +-----+-----+---------+------+---+--B Plus--+---+------+---------+-----+-----+
 | BCM | wPi |   Name  | Mode | V | Physical | V | Mode | Name    | wPi | BCM |
 +-----+-----+---------+------+---+----++----+---+------+---------+-----+-----+
 |     |     |    3.3v |      |   |  1 || 2  |   |      | 5v      |     |     |
 |   2 |   8 |   SDA.1 | ALT0 | 1 |  3 || 4  |   |      | 5V      |     |     |
 |   3 |   9 |   SCL.1 | ALT0 | 1 |  5 || 6  |   |      | 0v      |     |     |
 |   4 |   7 | GPIO. 7 |   IN | 0 |  7 || 8  | 1 | ALT0 | TxD     | 15  | 14  |
 |     |     |      0v |      |   |  9 || 10 | 1 | ALT0 | RxD     | 16  | 15  |
 |  17 |   0 | GPIO. 0 |   IN | 0 | 11 || 12 | 0 | IN   | GPIO. 1 | 1   | 18  |
 |  27 |   2 | GPIO. 2 |   IN | 0 | 13 || 14 |   |      | 0v      |     |     |
 |  22 |   3 | GPIO. 3 |   IN | 0 | 15 || 16 | 0 | IN   | GPIO. 4 | 4   | 23  |
 |     |     |    3.3v |      |   | 17 || 18 | 0 | IN   | GPIO. 5 | 5   | 24  |
 |  10 |  12 |    MOSI | ALT0 | 0 | 19 || 20 |   |      | 0v      |     |     |
 |   9 |  13 |    MISO | ALT0 | 0 | 21 || 22 | 0 | IN   | GPIO. 6 | 6   | 25  |
 |  11 |  14 |    SCLK | ALT0 | 0 | 23 || 24 | 1 | OUT  | CE0     | 10  | 8   |
 |     |     |      0v |      |   | 25 || 26 | 1 | OUT  | CE1     | 11  | 7   |
 |   0 |  30 |   SDA.0 |   IN | 1 | 27 || 28 | 1 | IN   | SCL.0   | 31  | 1   |
 |   5 |  21 | GPIO.21 |   IN | 1 | 29 || 30 |   |      | 0v      |     |     |
 |   6 |  22 | GPIO.22 |   IN | 1 | 31 || 32 | 0 | IN   | GPIO.26 | 26  | 12  |
 |  13 |  23 | GPIO.23 |   IN | 0 | 33 || 34 |   |      | 0v      |     |     |
 |  19 |  24 | GPIO.24 |   IN | 0 | 35 || 36 | 0 | IN   | GPIO.27 | 27  | 16  |
 |  26 |  25 | GPIO.25 |   IN | 0 | 37 || 38 | 0 | IN   | GPIO.28 | 28  | 20  |
 |     |     |      0v |      |   | 39 || 40 | 0 | IN   | GPIO.29 | 29  | 21  |
 +-----+-----+---------+------+---+----++----+---+------+---------+-----+-----+
 | BCM | wPi |   Name  | Mode | V | Physical | V | Mode | Name    | wPi | BCM |
 +-----+-----+---------+------+---+--B Plus--+---+------+---------+-----+-----+
```

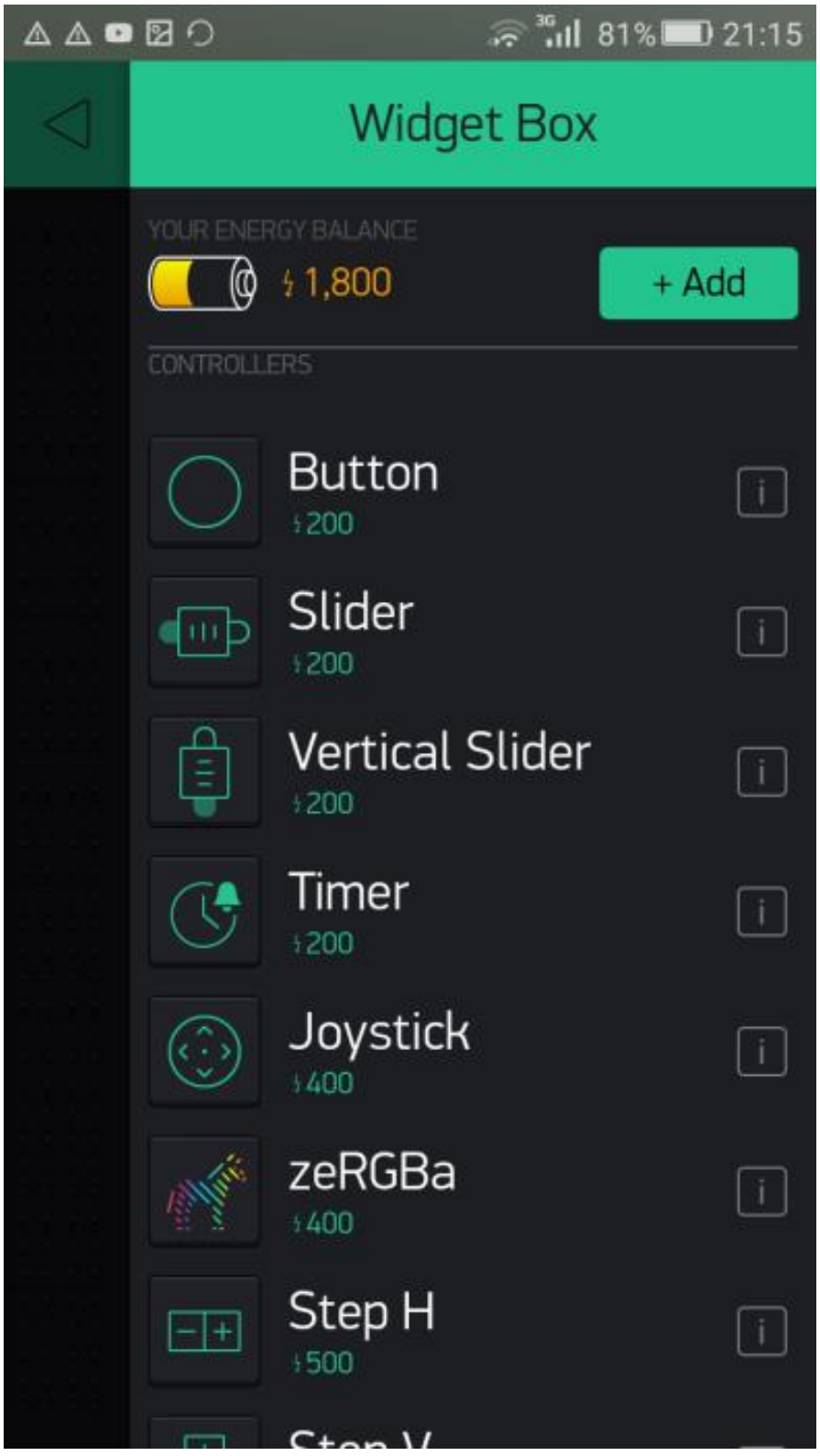

74%
22:56
Blynk
New Project
My Apps
Community

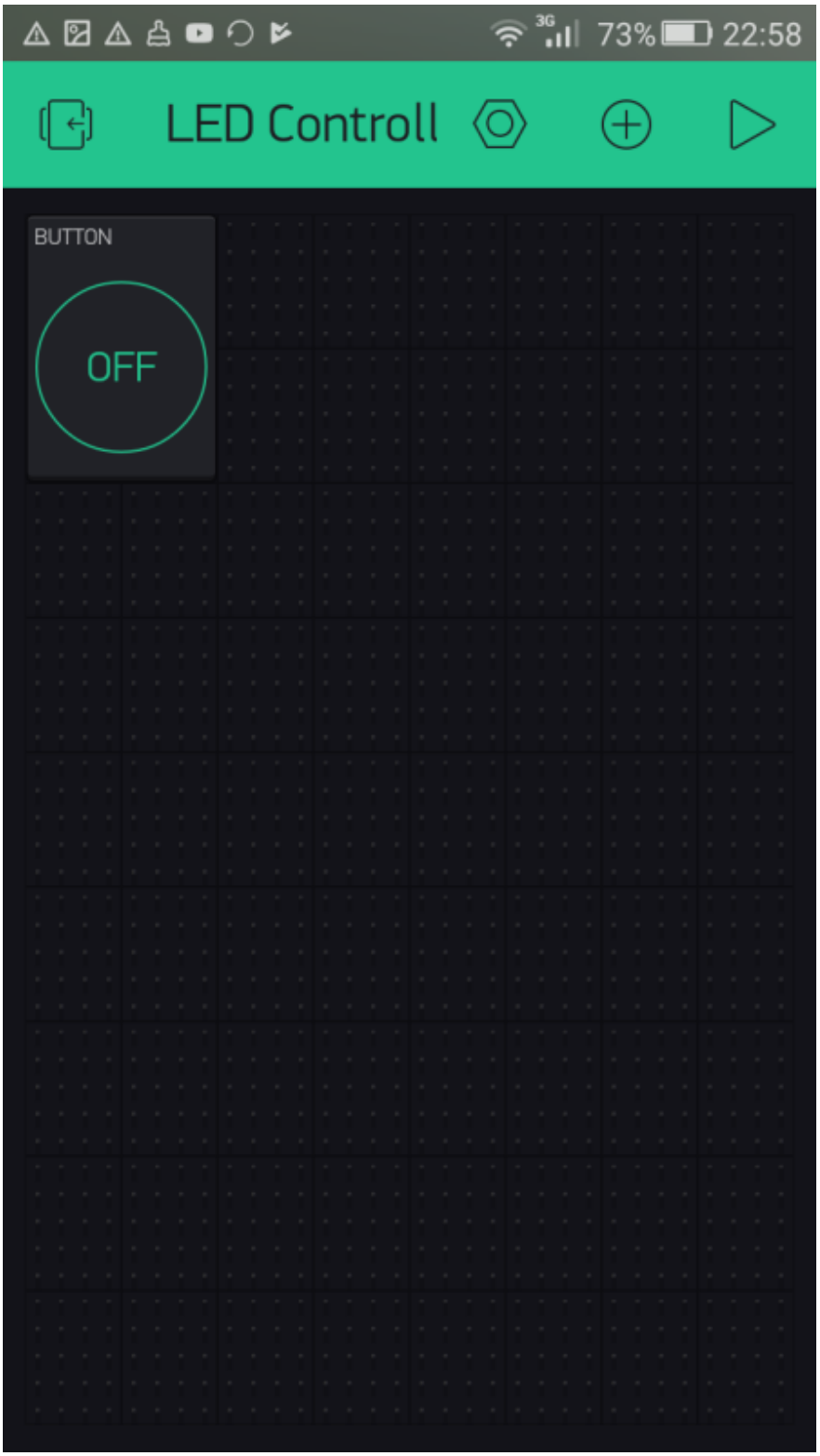

73%
22:56
Create New Project
LED Controller
CHOOSE DEVICE
ESP8266
THEME
DARK
LIGHT
Create

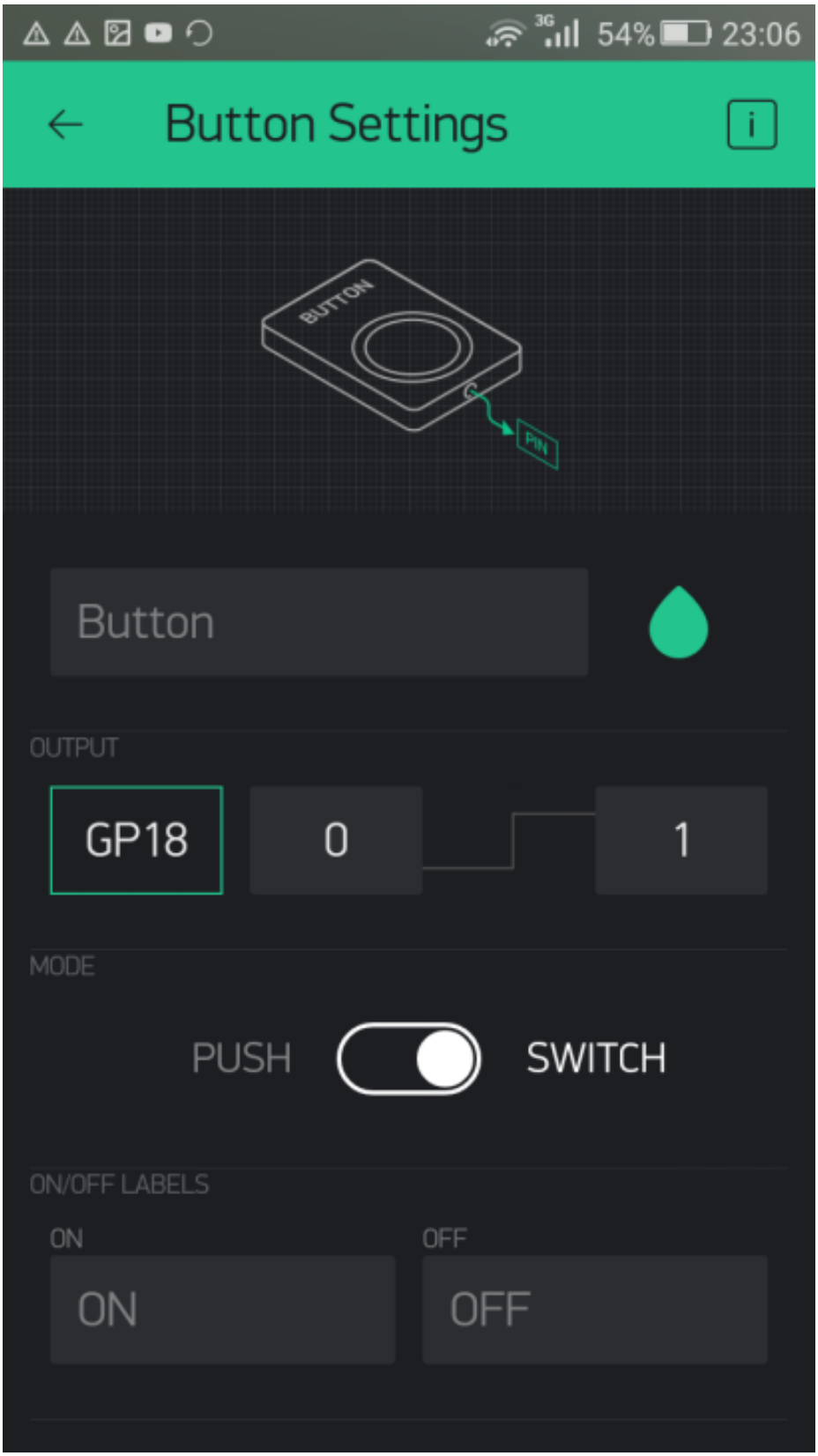

73% 22:57
Create New Project
LED Controller
CHOOSE DEVICE
ESP8266
THEME
Select your hardware
OK
Particle Photon
Raspberry Pi 2/A+/B+
Raspberry Pi 3 B
Raspberry Pi A/B (Rev2)
Raspberry Pi B (Rev1)

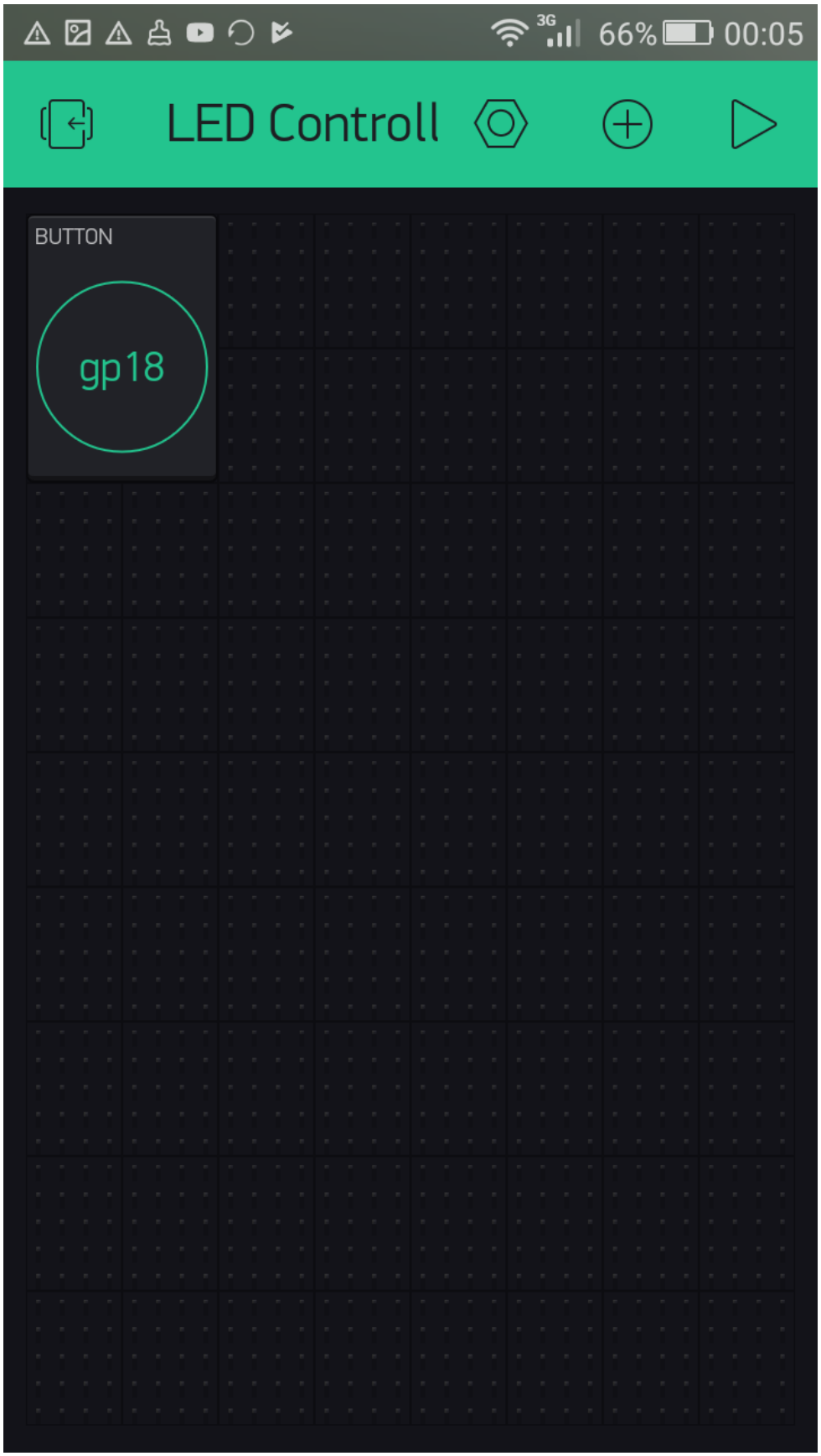

73%
22:57
Create New Project
LED Controller
CHOOSE DEVICE
Raspberry Pi 3 B
CONNECTION TYPE
WiFi
THEME
DARK
LIGHT
Create

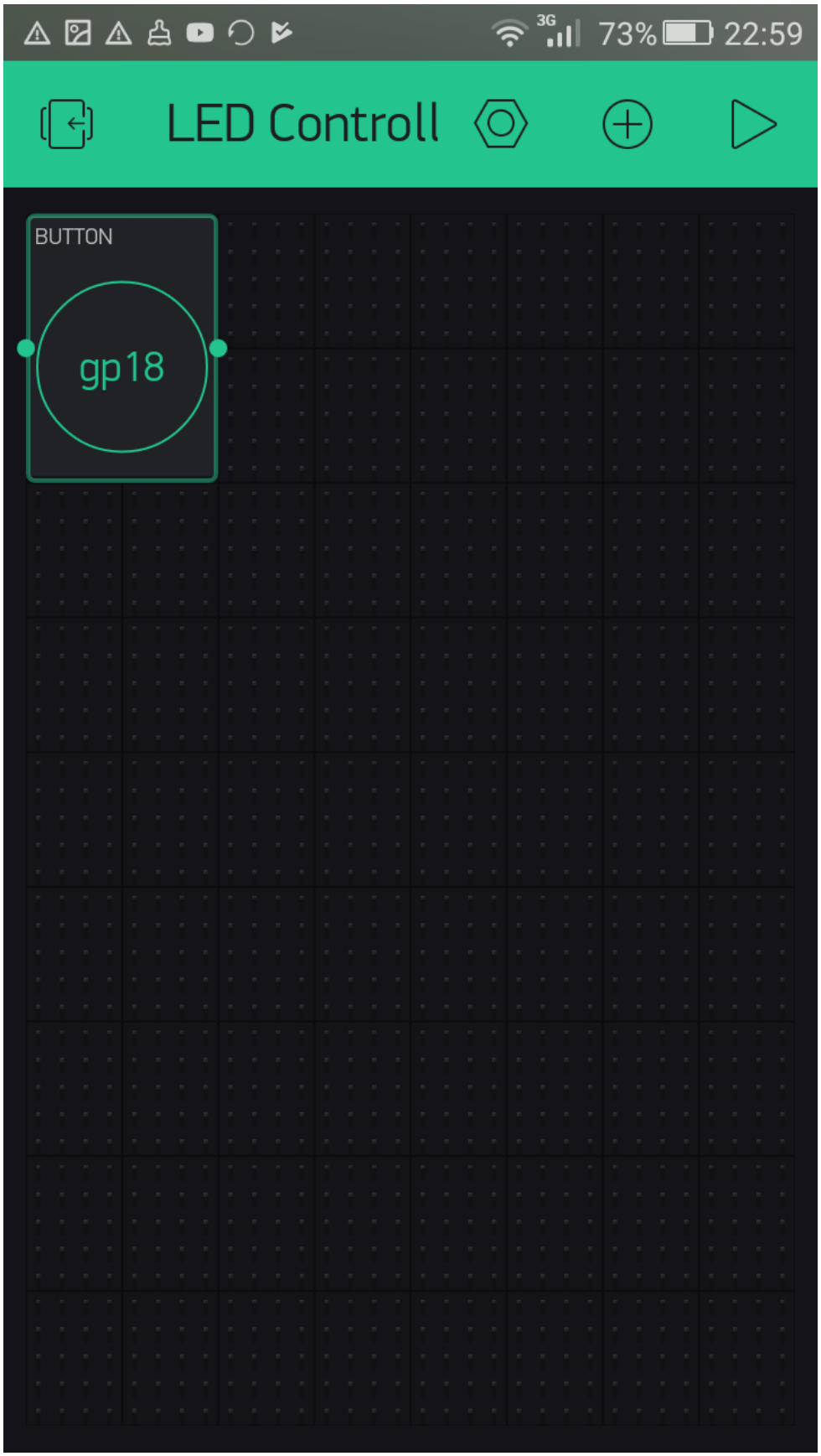

3G
73%
22:57
LED Controll

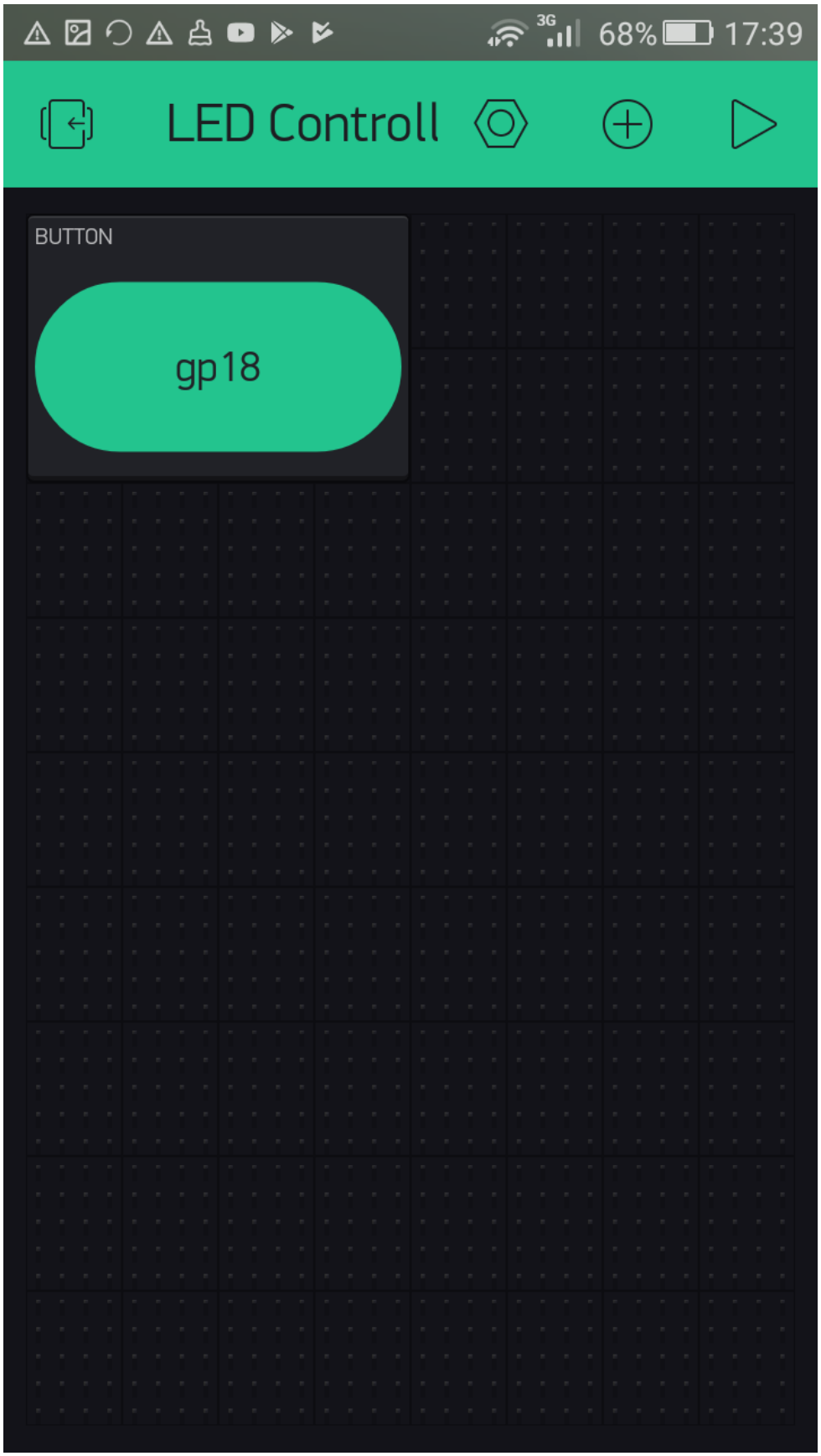

81% 21:15
Widget Box
YOUR ENERGY BALANCE
1,800
+ Add
CONTROLLERS
Button
200
Slider
200
Vertical Slider
200
Timer
200
Joystick
400
zeRGBa
400
Step H
500

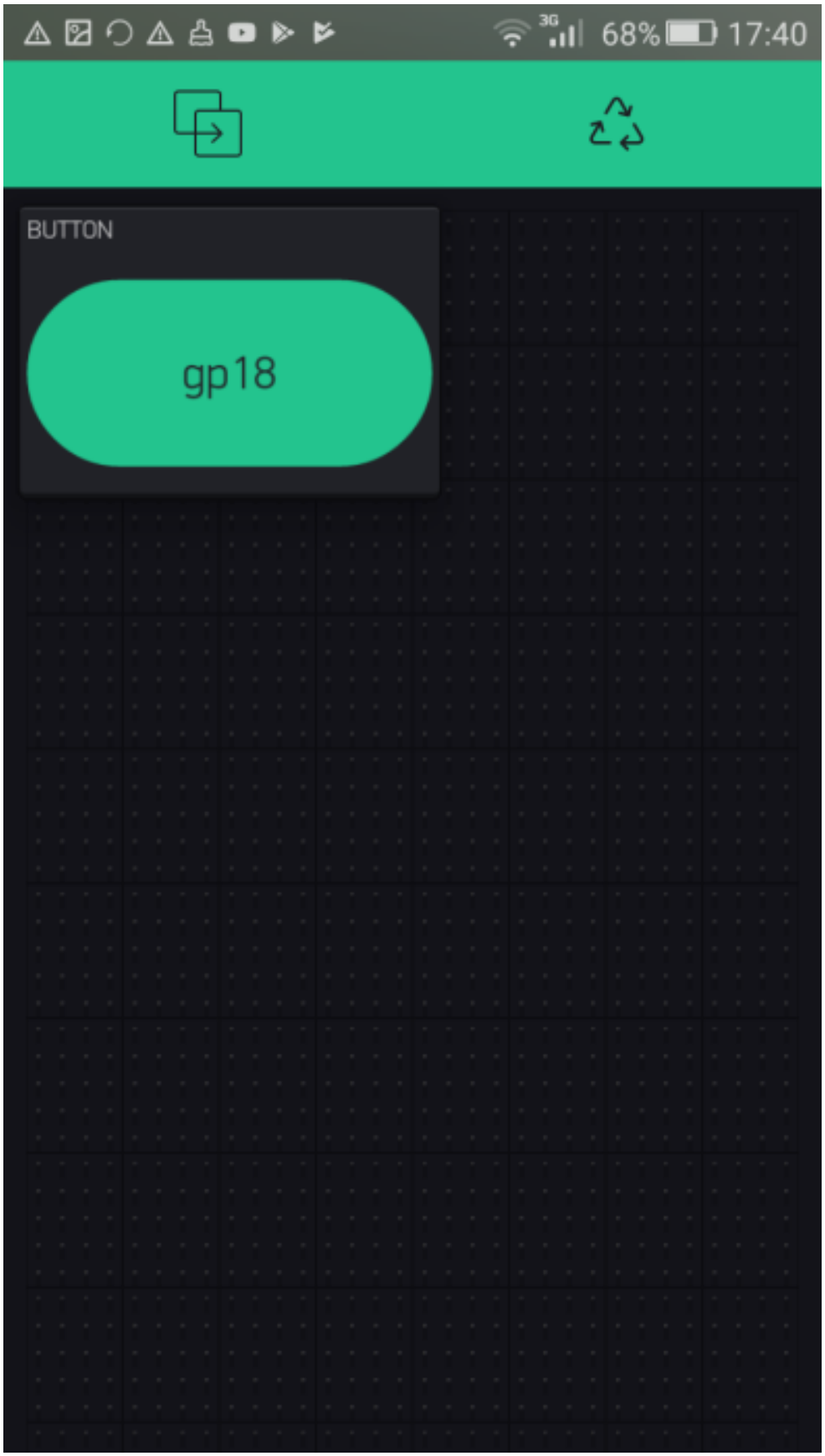

73%
22:58
LED Controll
BUTTON
OFF


54% 23:06
Button Settings
BUTTON
PIN
Button
OUTPUT
GP18
0
1
MODE
PUSH
SWITCH
ON/OFF LABELS
ON
OFF
ON
OFF

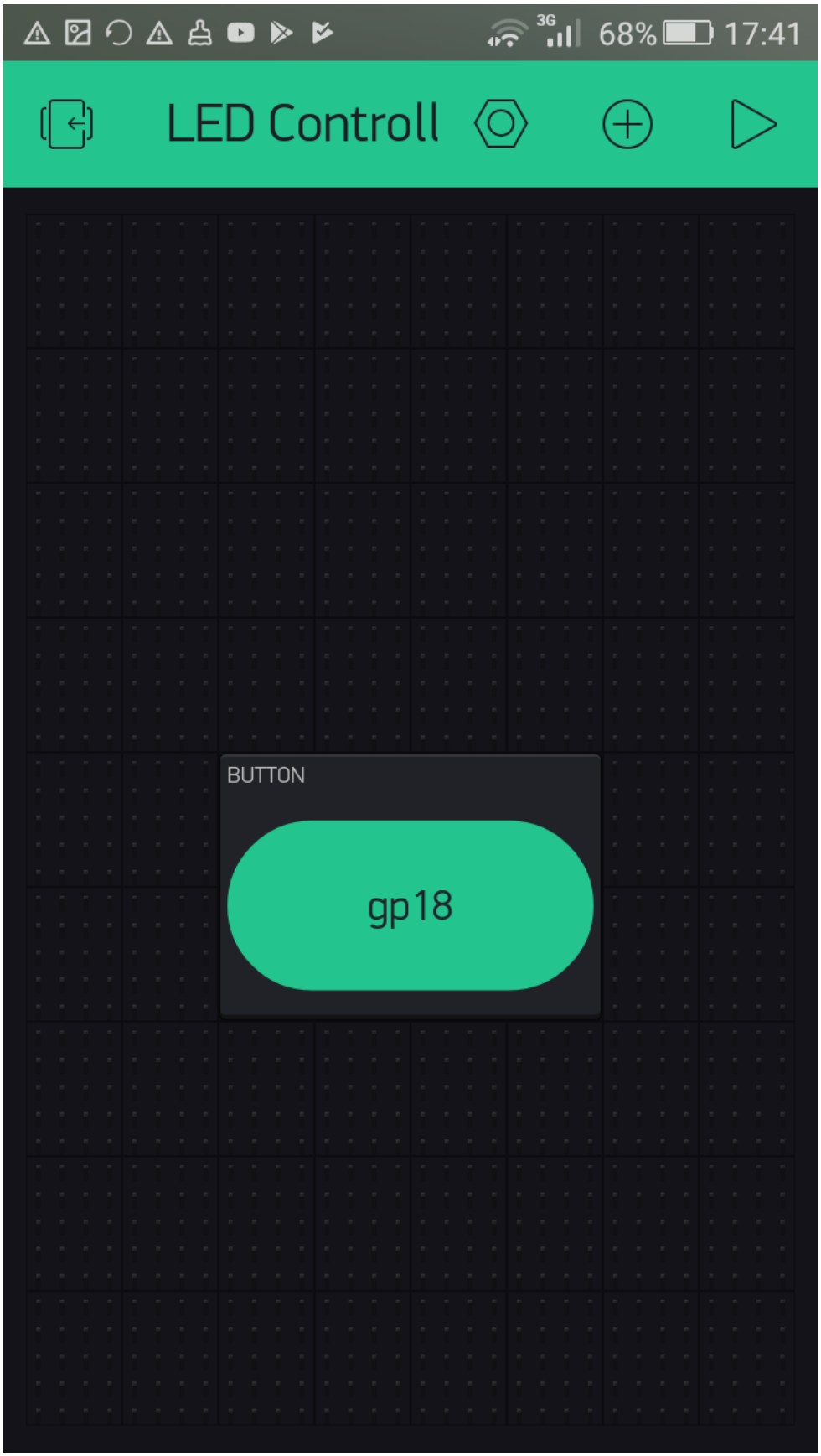

66%
00:05
LED Controll
BUTTON
gp18

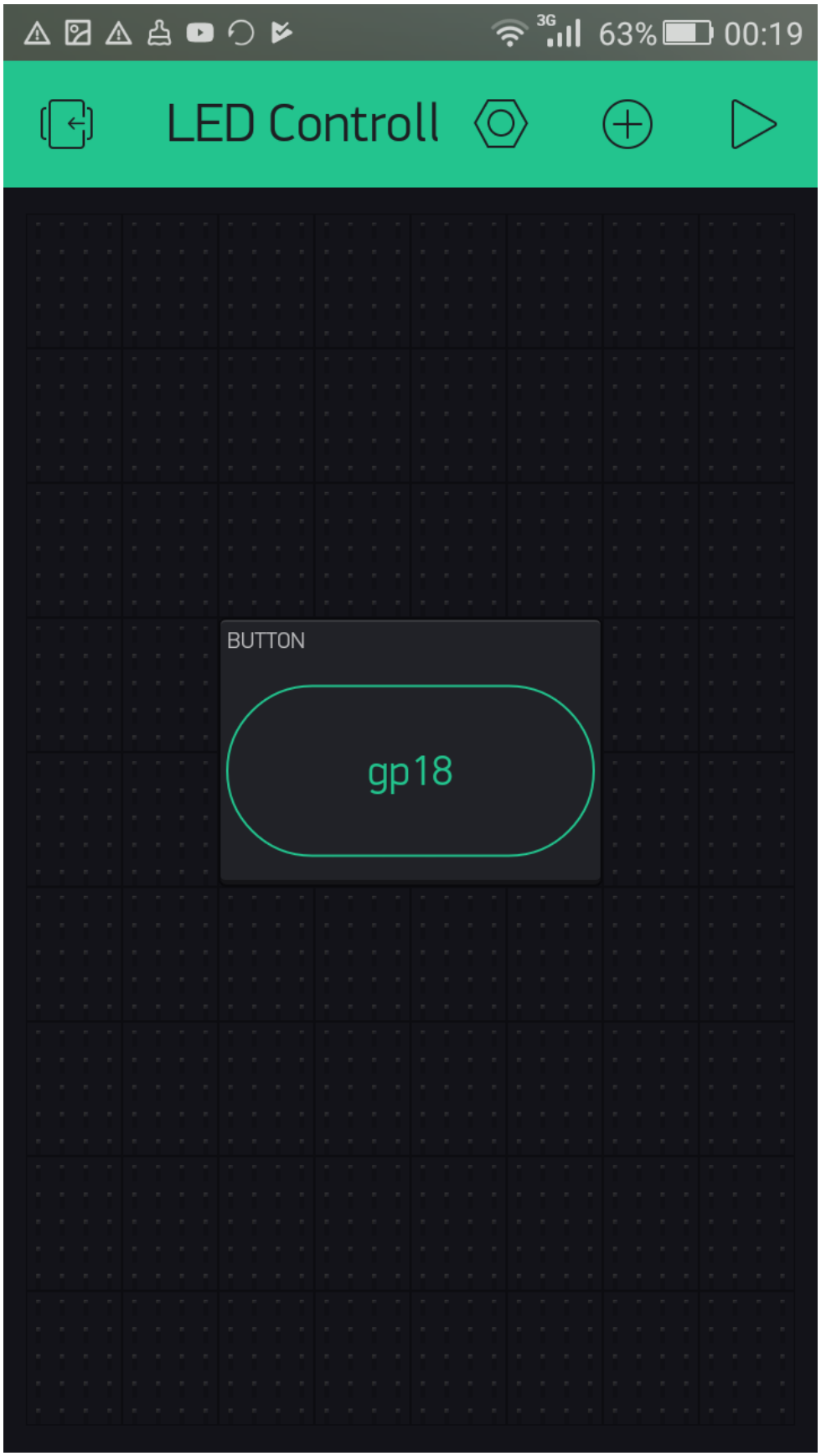

73%
22:59
LED Controll
BUTTON
gp18

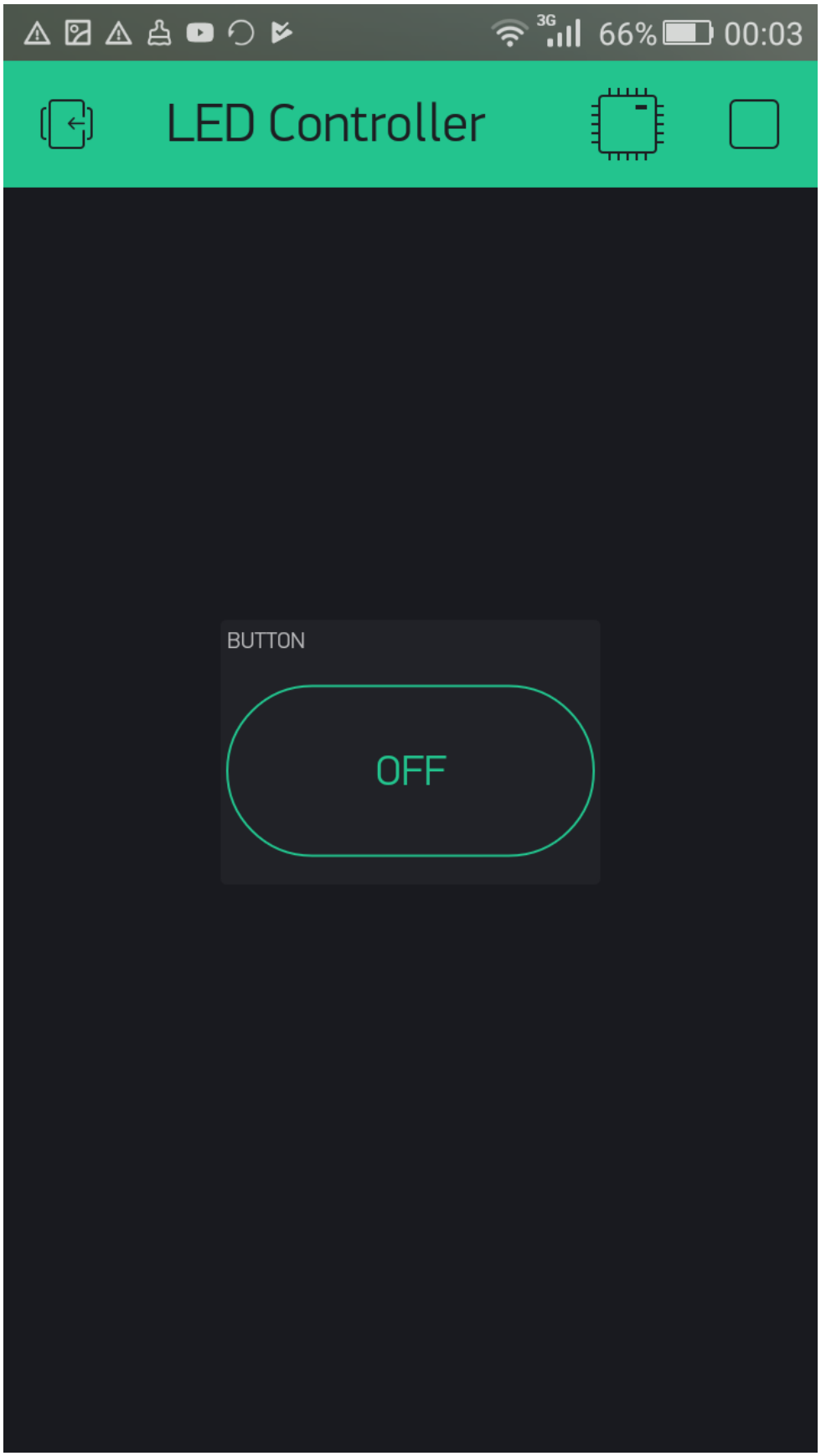

68%
17:39
LED Controll
BUTTON
gp18

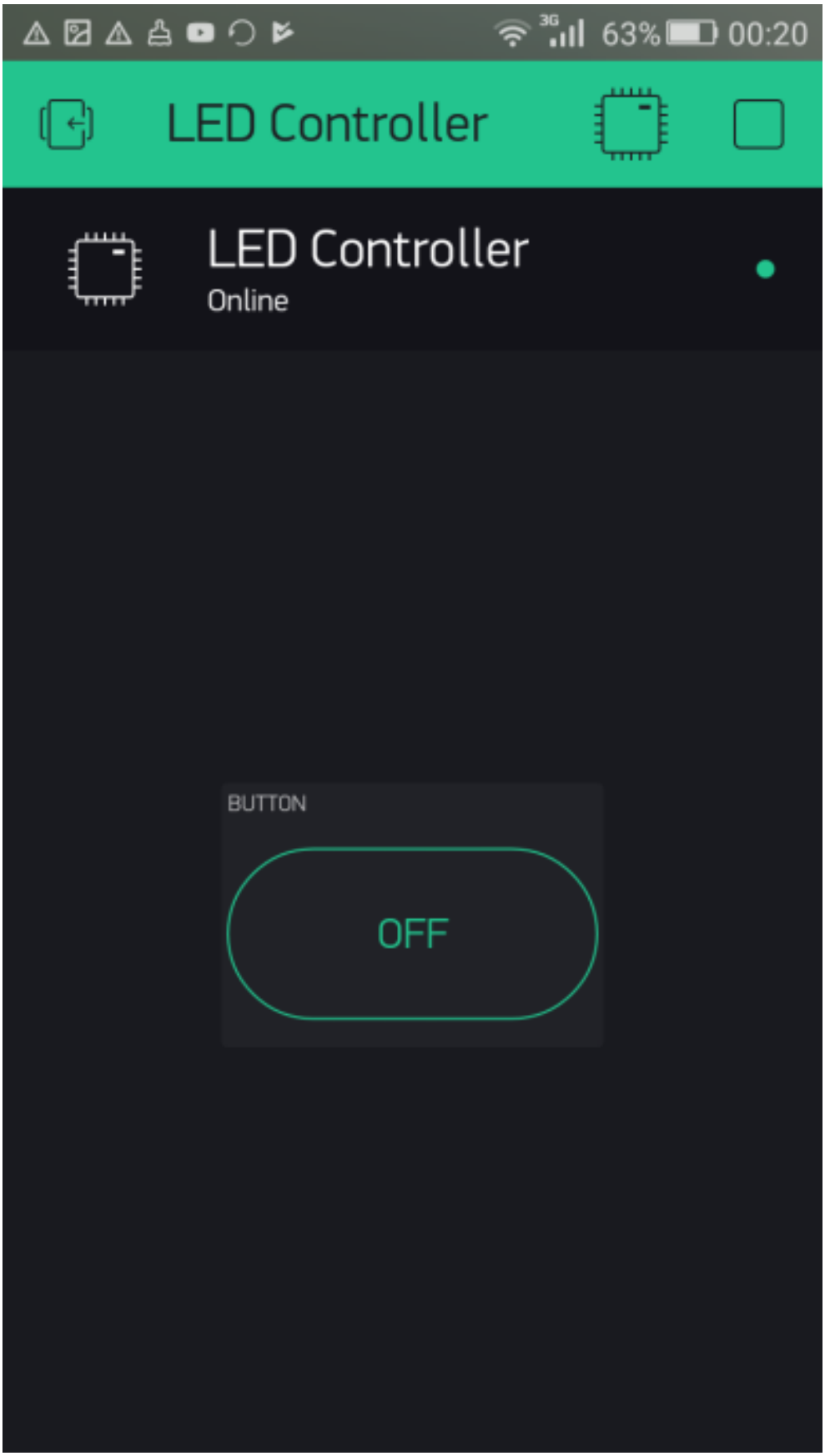

68%
17:40
BUTTON
gp18

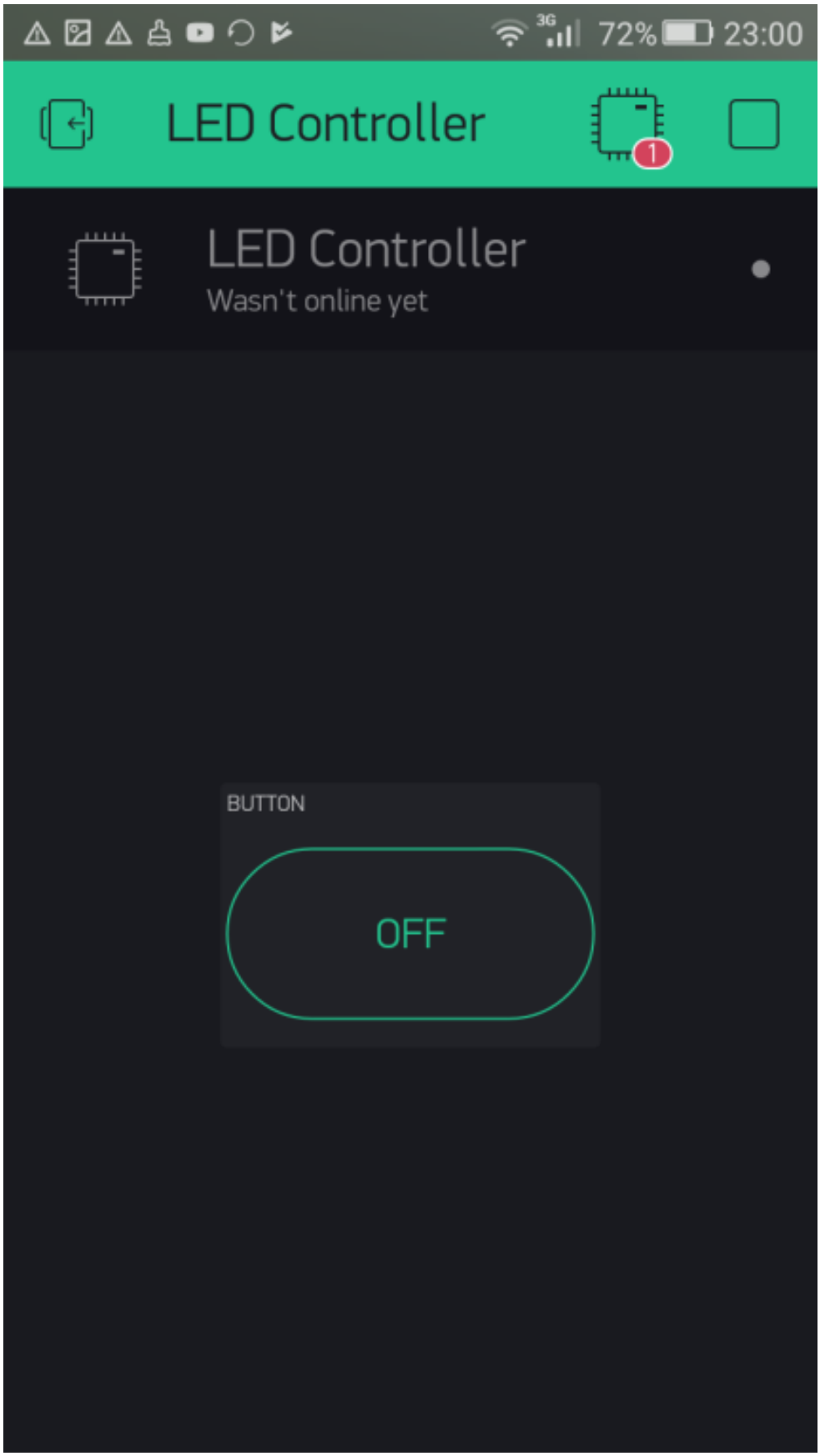
68%
17:41
LED Controll
BUTTON
gp18

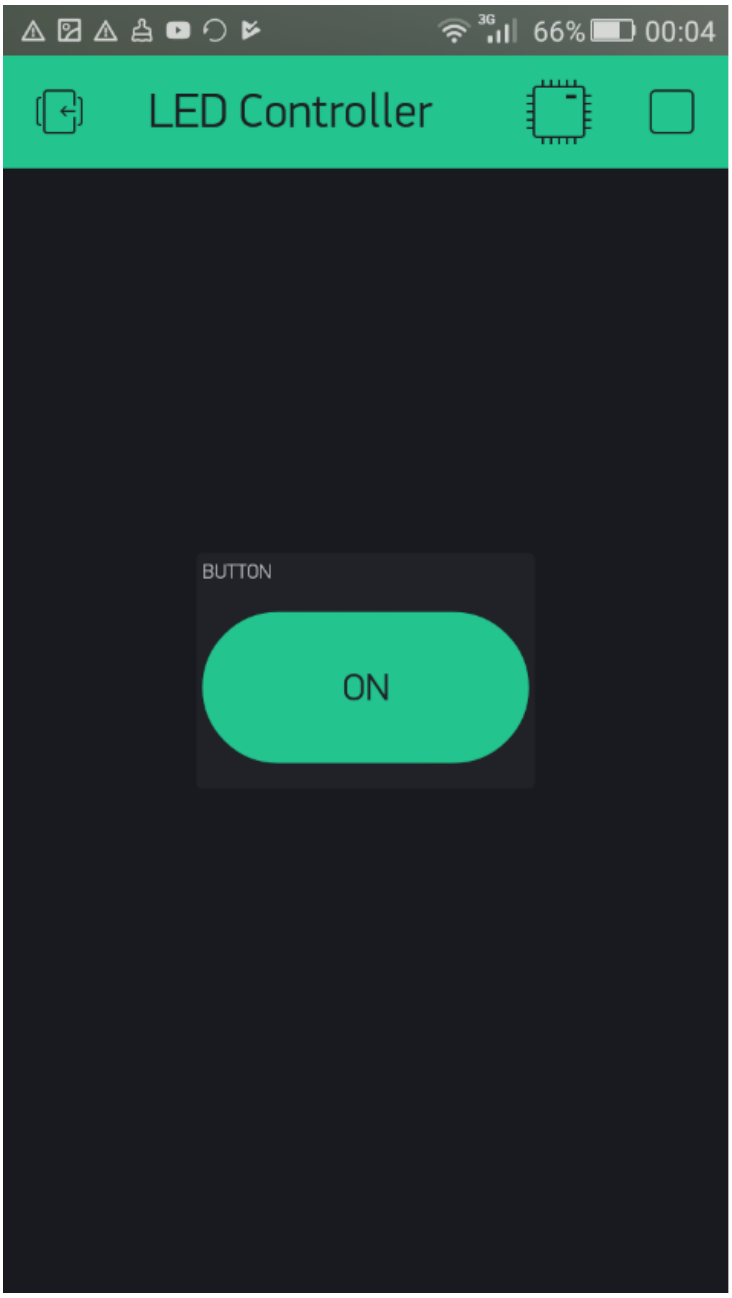

68%
17:41
LED Controll
BUTTON
gp18

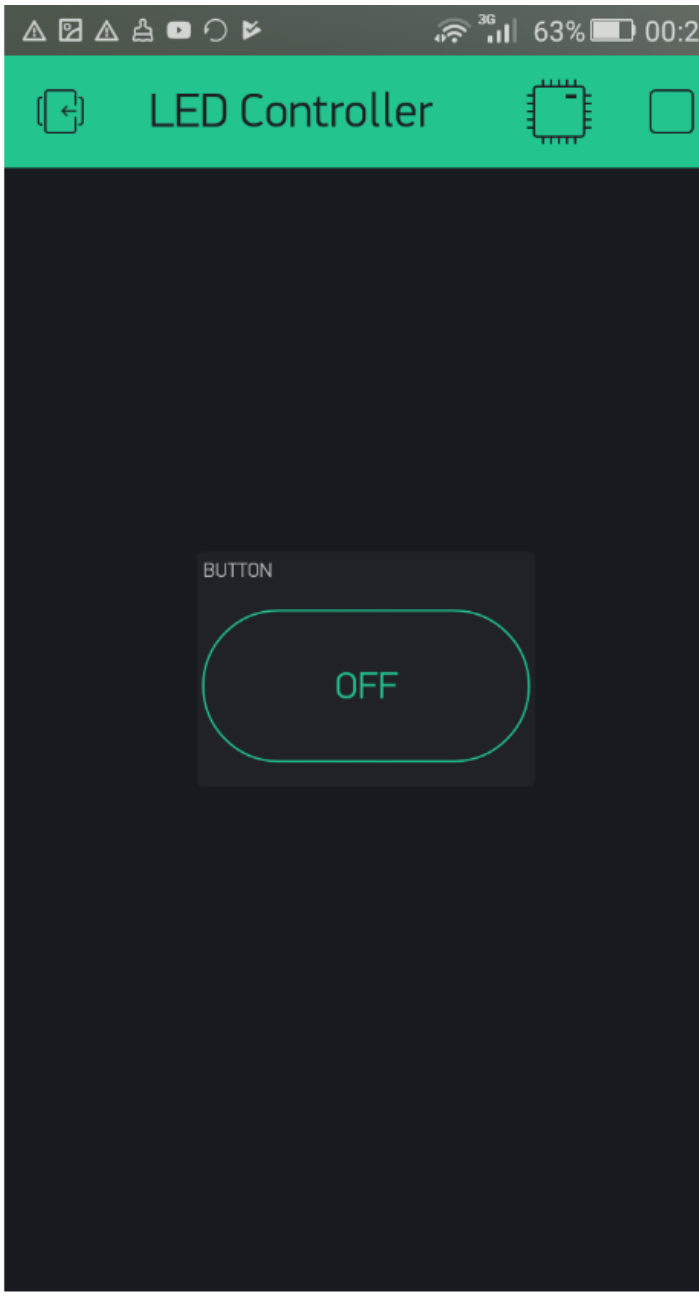

63%
00:19
LED Controll
BUTTON
gp18

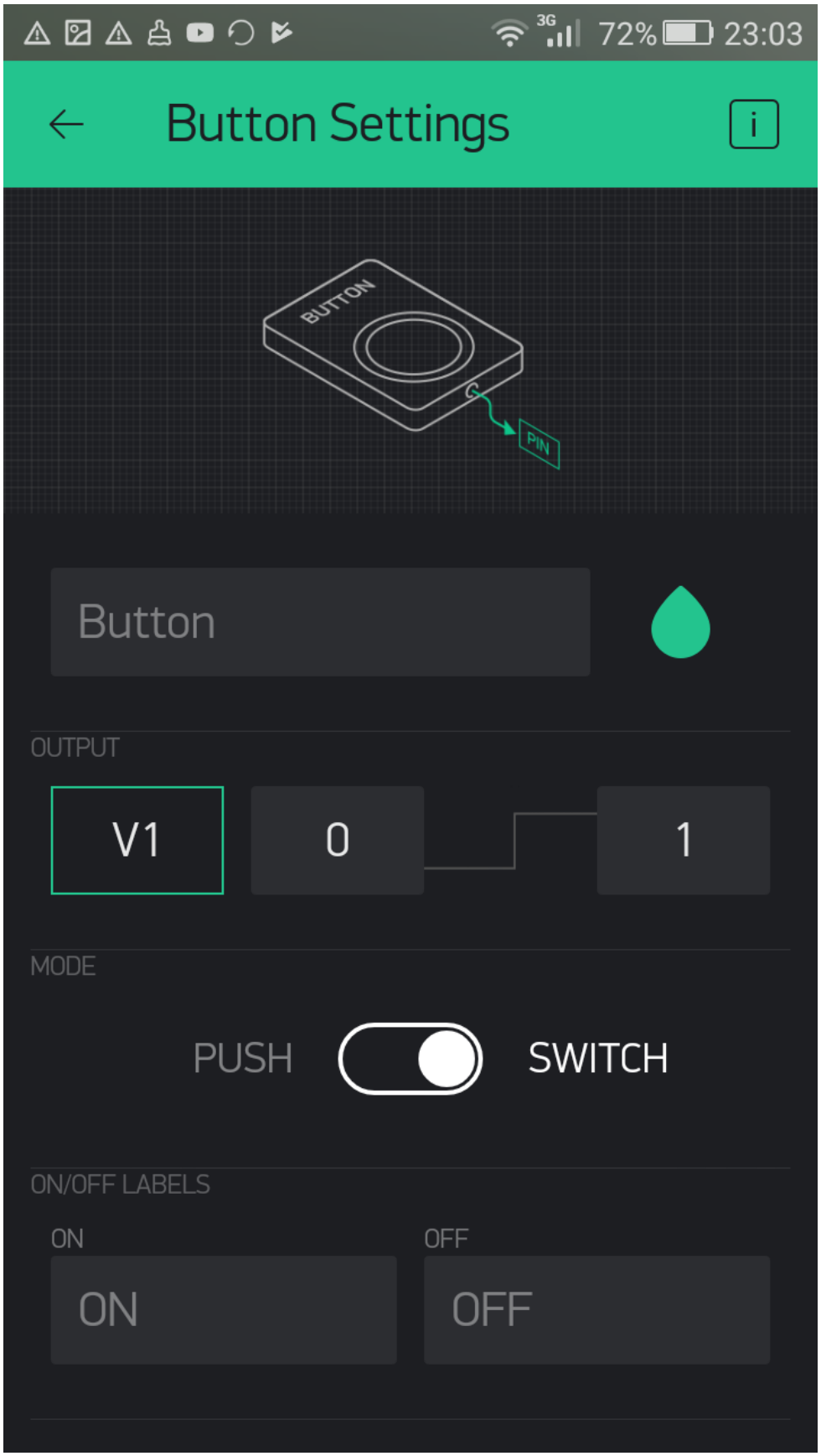

66%
00:03
LED Controller
BUTTON
OFF

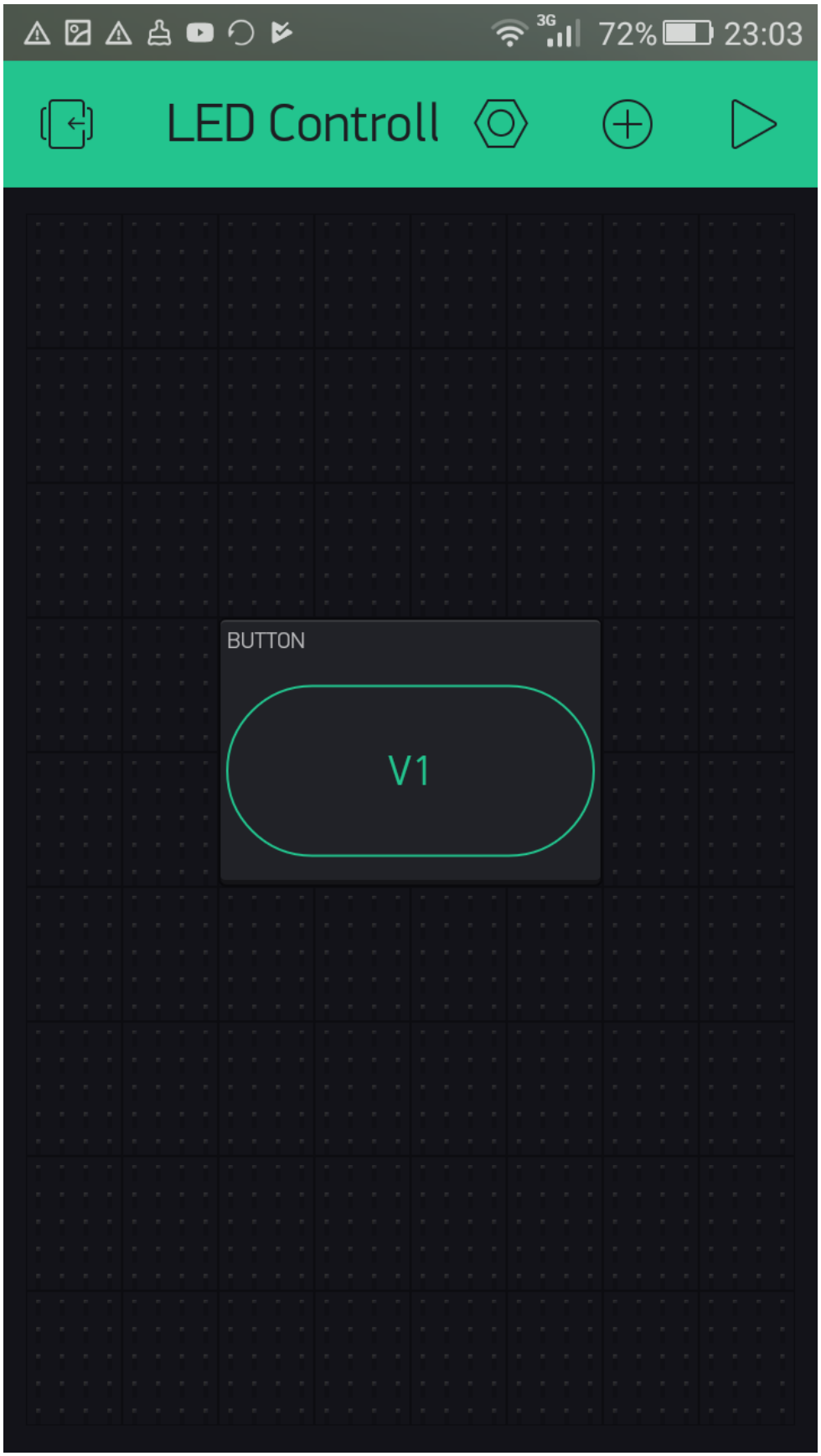

63%
00:20
LED Controller
LED Controller
Online
BUTTON
OFF

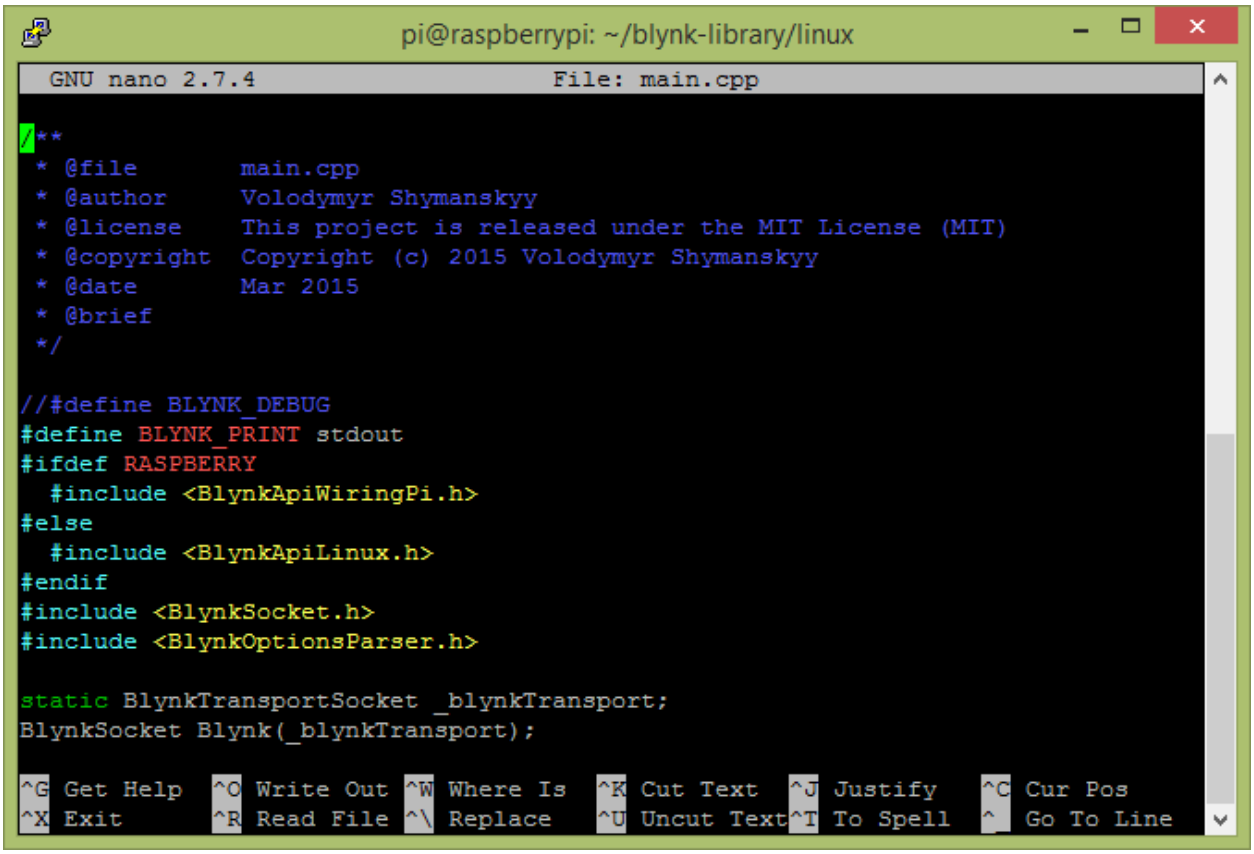

72%
23:00
LED Controller
1
LED Controller
Wasn't online yet
BUTTON
OFF

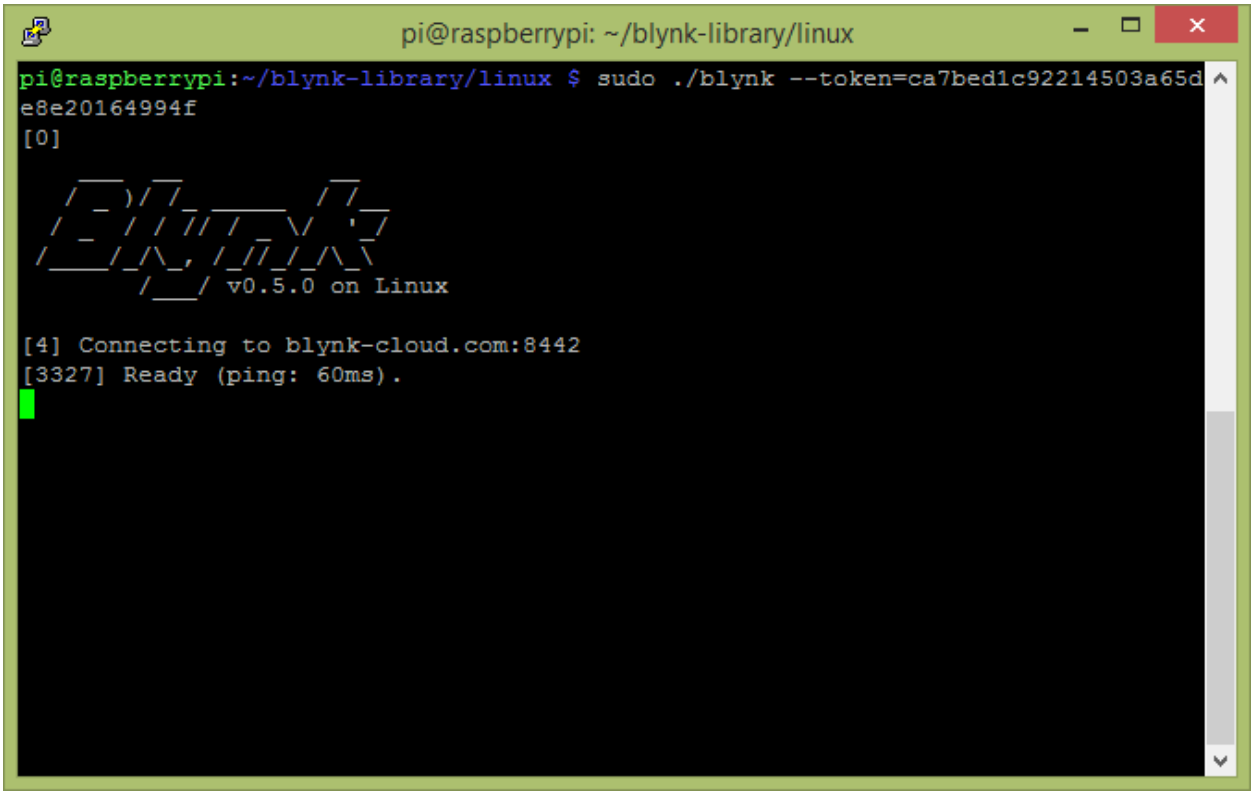

66% 00:04
LED Controller
BUTTON
ON

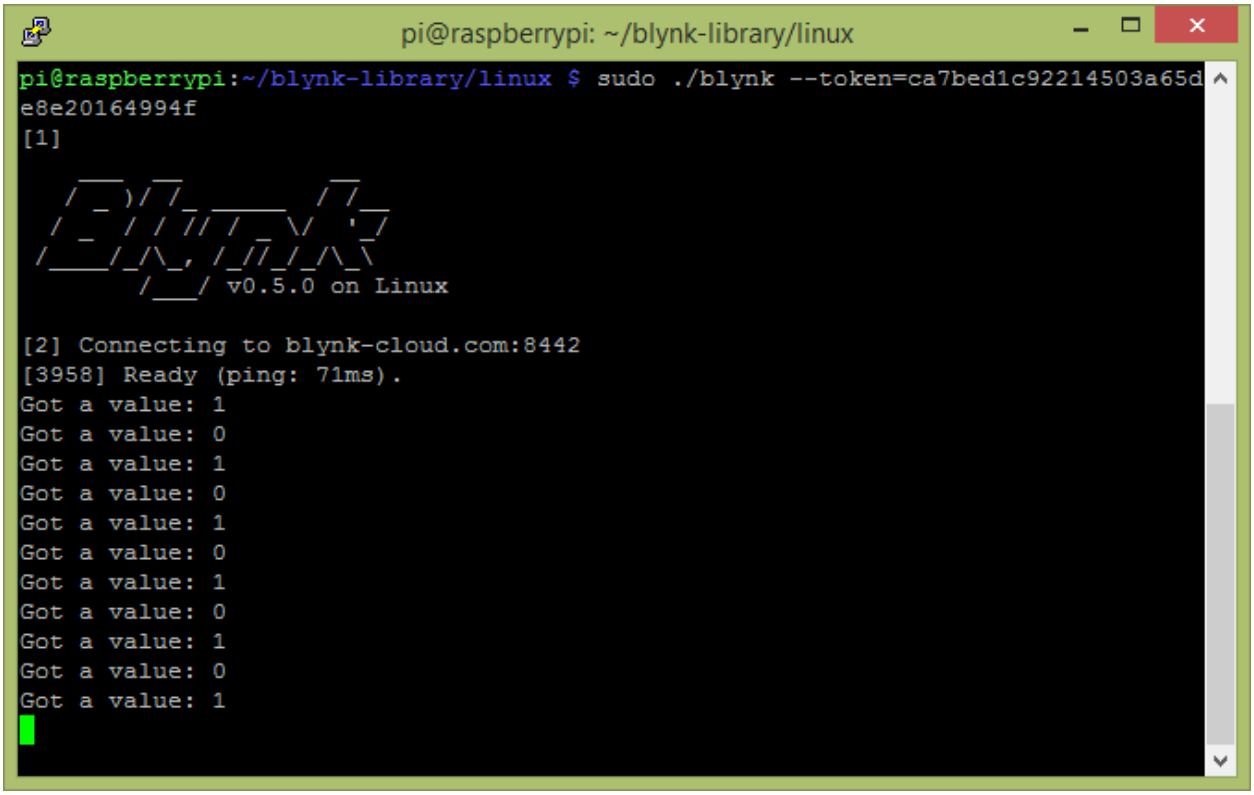

63%
LED Controller
BUTTON
OFF


72%
23:03
Button Settings
BUTTON
PIN
Button
OUTPUT
V1
0
1
MODE
PUSH
SWITCH
ON/OFF LABELS
ON
OFF
ON
OFF

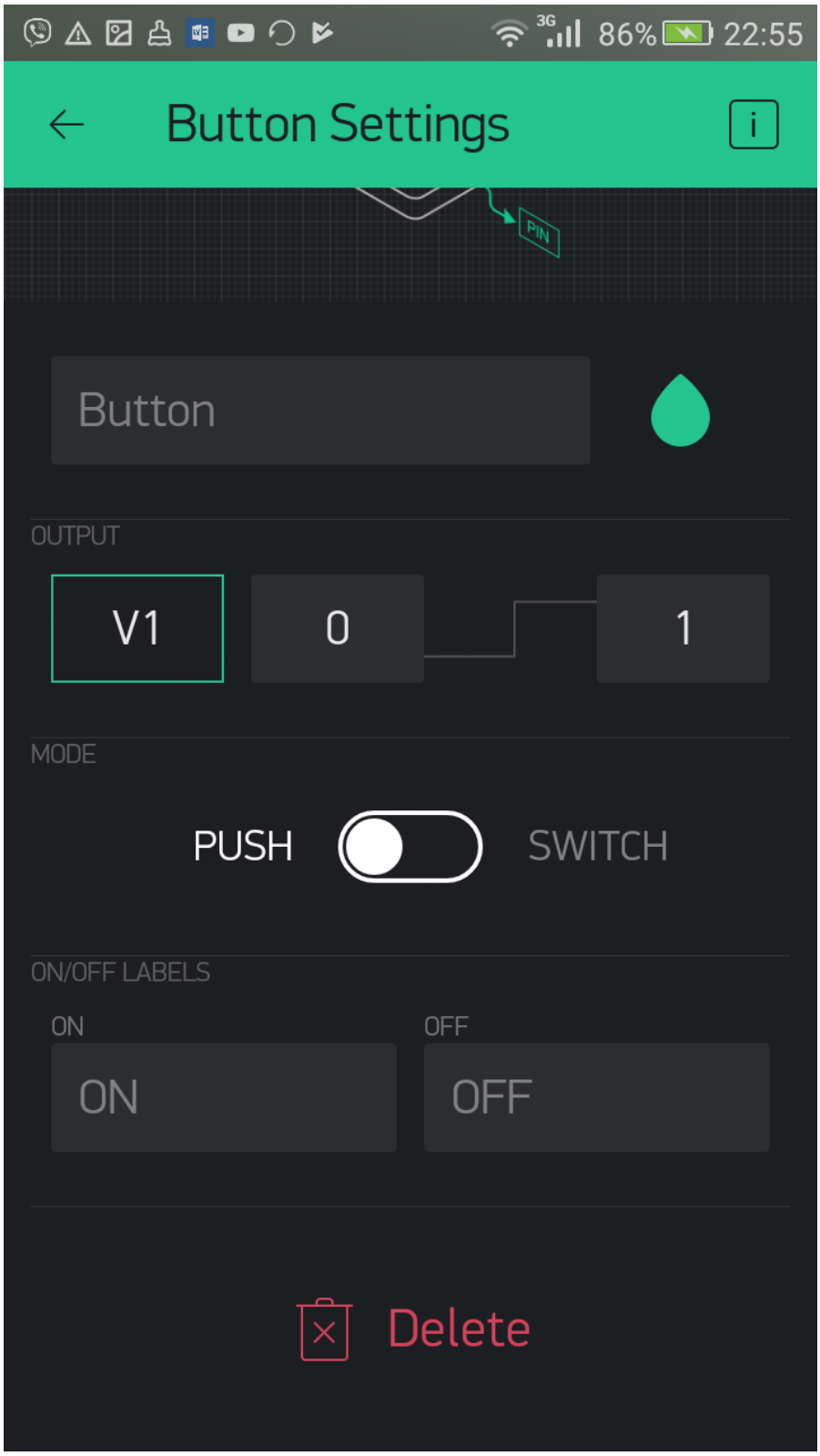

72%
23:03
LED Controll
BUTTON
V1

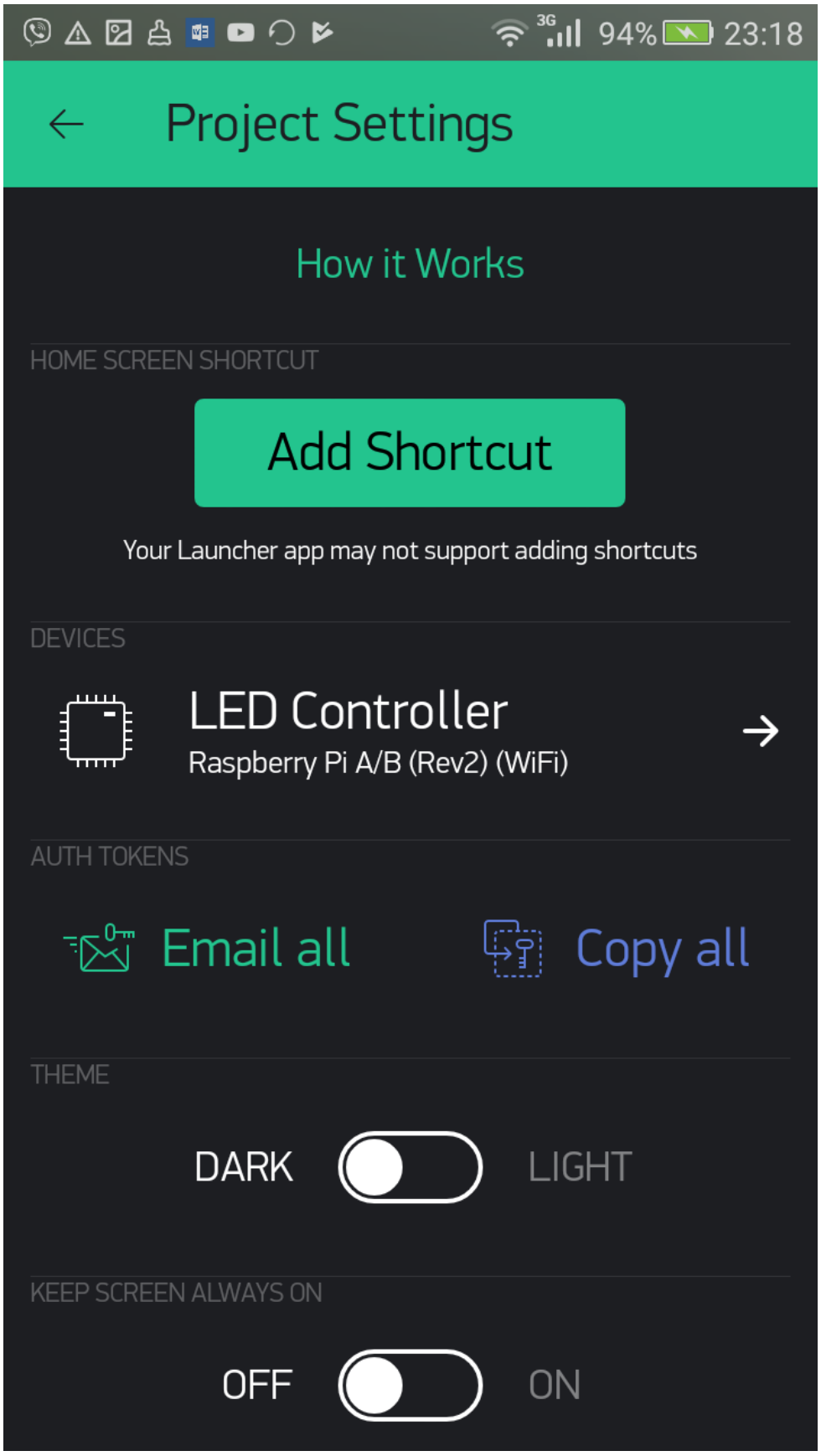

pi@raspberrypi: ~/blynk-library/linux
GNU nano 2.7.4 File: main.cpp
/**
* @file main.cpp
* @author Volodymyr Shymanskyy
* @license This project is released under the MIT License (MIT)
* @copyright Copyright (c) 2015 Volodymyr Shymanskyy
* @date Mar 2015
* @brief
*/
//#define BLYNK_DEBUG
#define BLYNK_PRINT stdout
#ifdef RASPBERRY
#include <BlynkApiWiringPi.h>
#else
#include <BlynkApiLinux.h>
#endif
#include <BlynkSocket.h>
#include <BlynkOptionsParser.h>
static BlynkTransportSocket _blynkTransport;
BlynkSocket Blynk(_blynkTransport);
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit ^R Read File ^\ Replace ^U Uncut Text ^T To Spell ^_ Go To Line

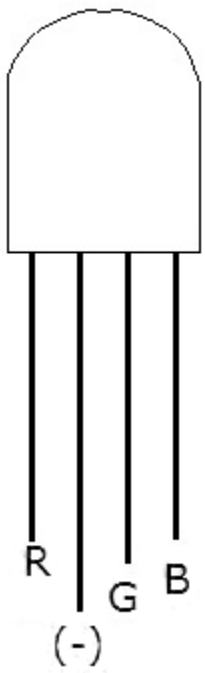

pi@raspberrypi: ~/blynk-library/linux
pi@raspberrypi:~/blynk-library/linux $ sudo ./blynk --token=ca7bed1c92214503a65d
e8e20164994f
[0]
v0.5.0 on Linux
[4] Connecting to blynk-cloud.com:8442
[3327] Ready (ping: 60ms).

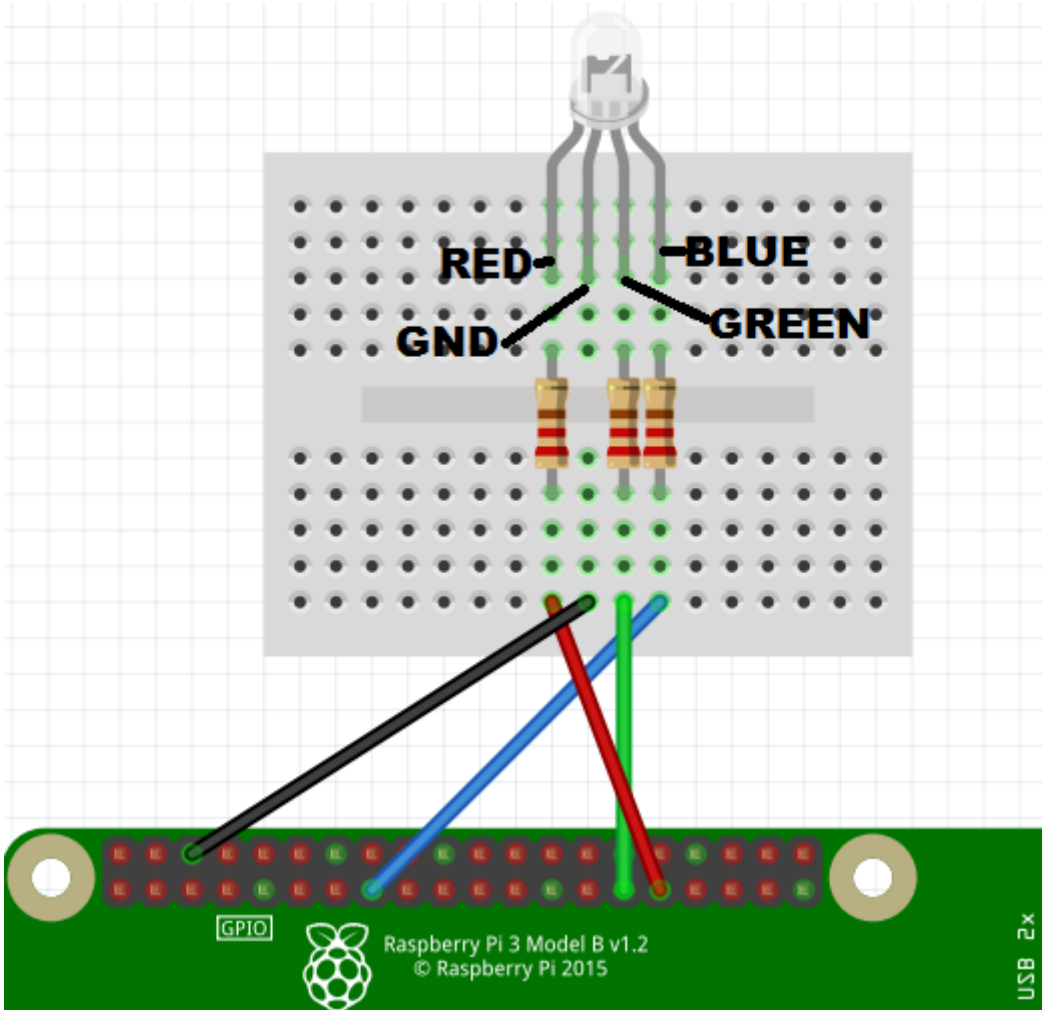

pi@raspberrypi: ~/blynk-library/linux
pi@raspberrypi:~/blynk-library/linux $ sudo ./blynk --token=ca7bed1c92214503a65de8e20164994f
[1]
v0.5.0 on Linux
[2] Connecting to blynk-cloud.com:8442
[3958] Ready (ping: 71ms).
Got a value: 1
Got a value: 0
Got a value: 1
Got a value: 0
Got a value: 1
Got a value: 0
Got a value: 1
Got a value: 0
Got a value: 1
Got a value: 0
Got a value: 1

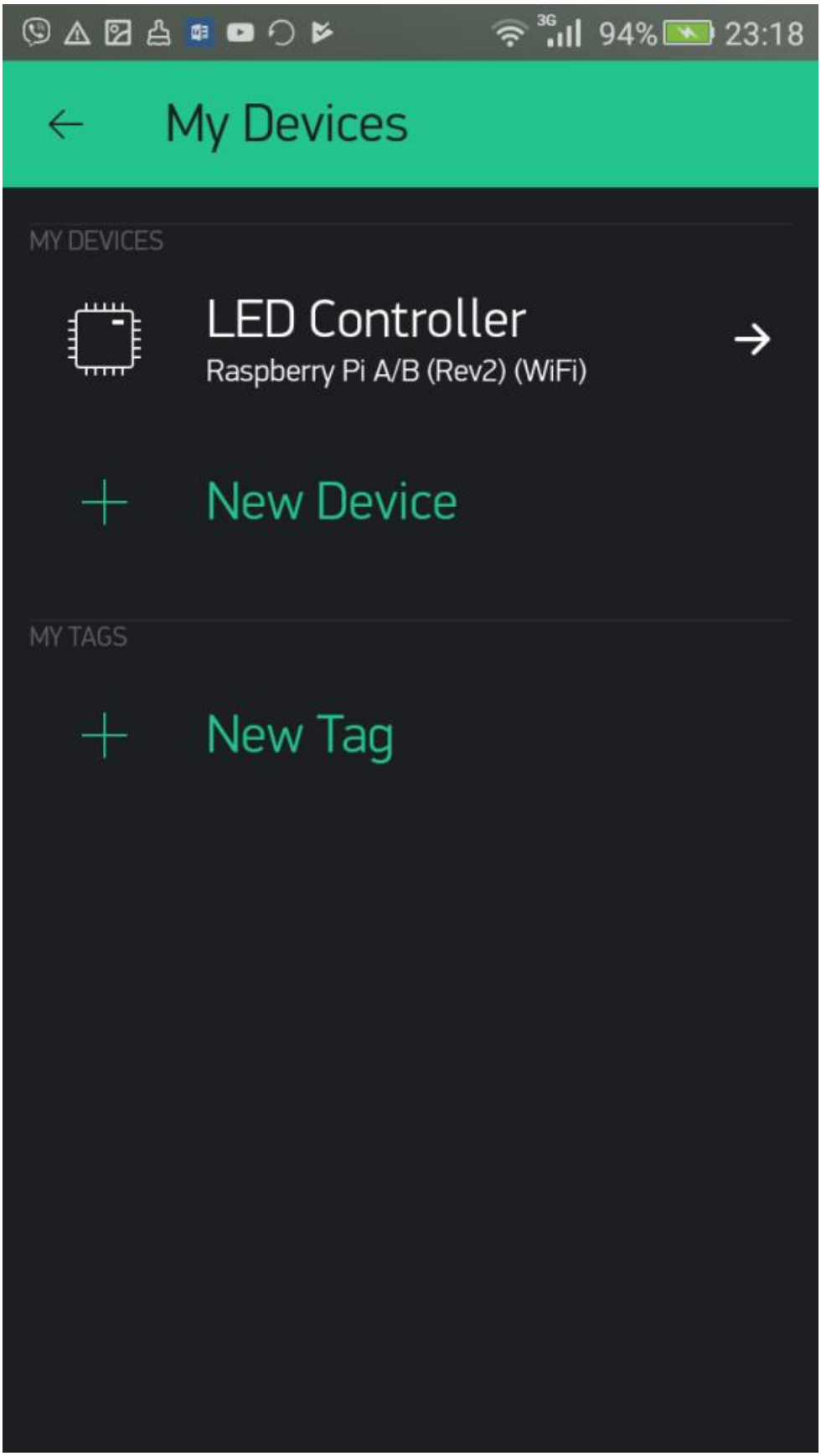
Chapter 3: Using Controller Widgets

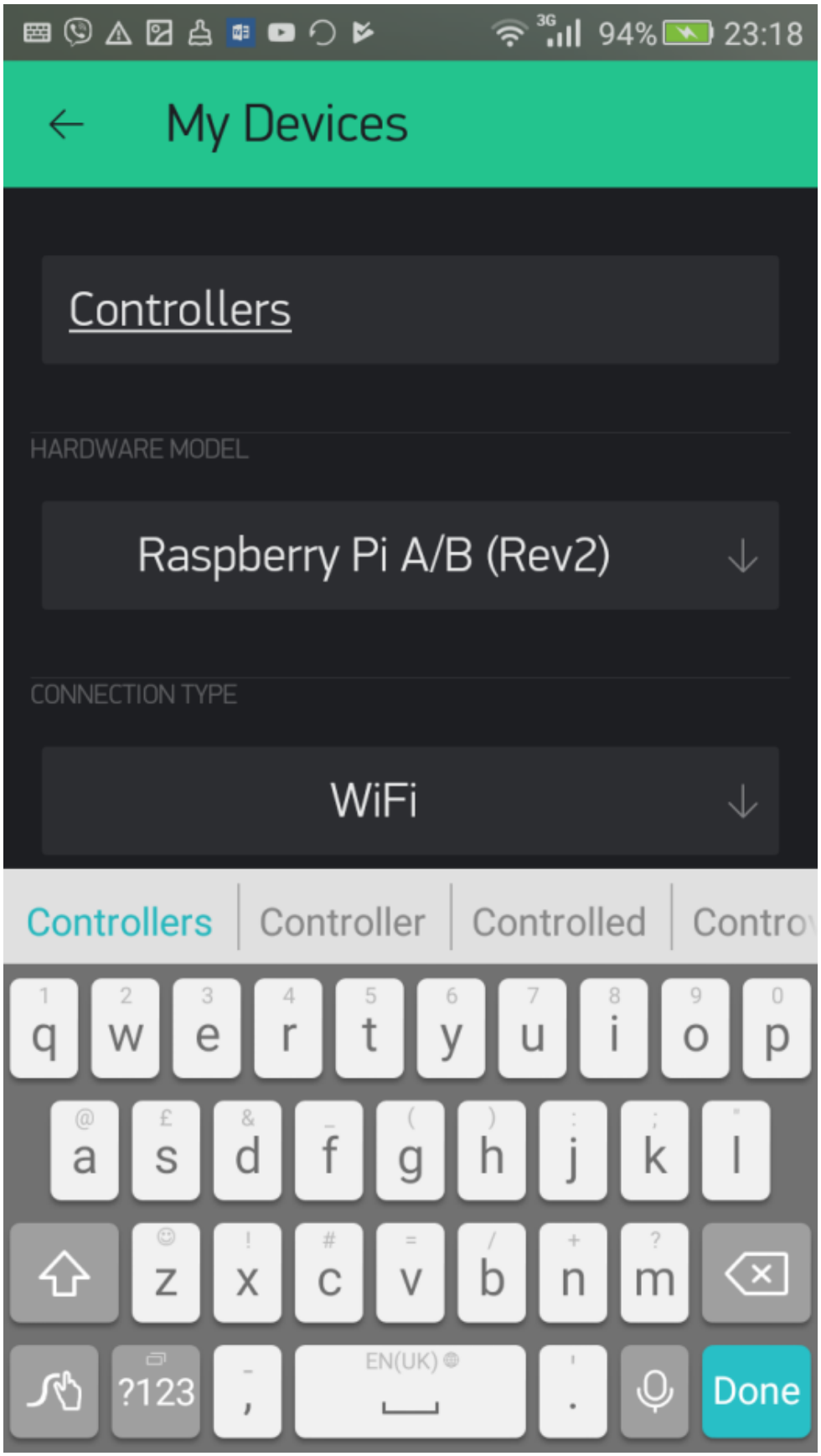


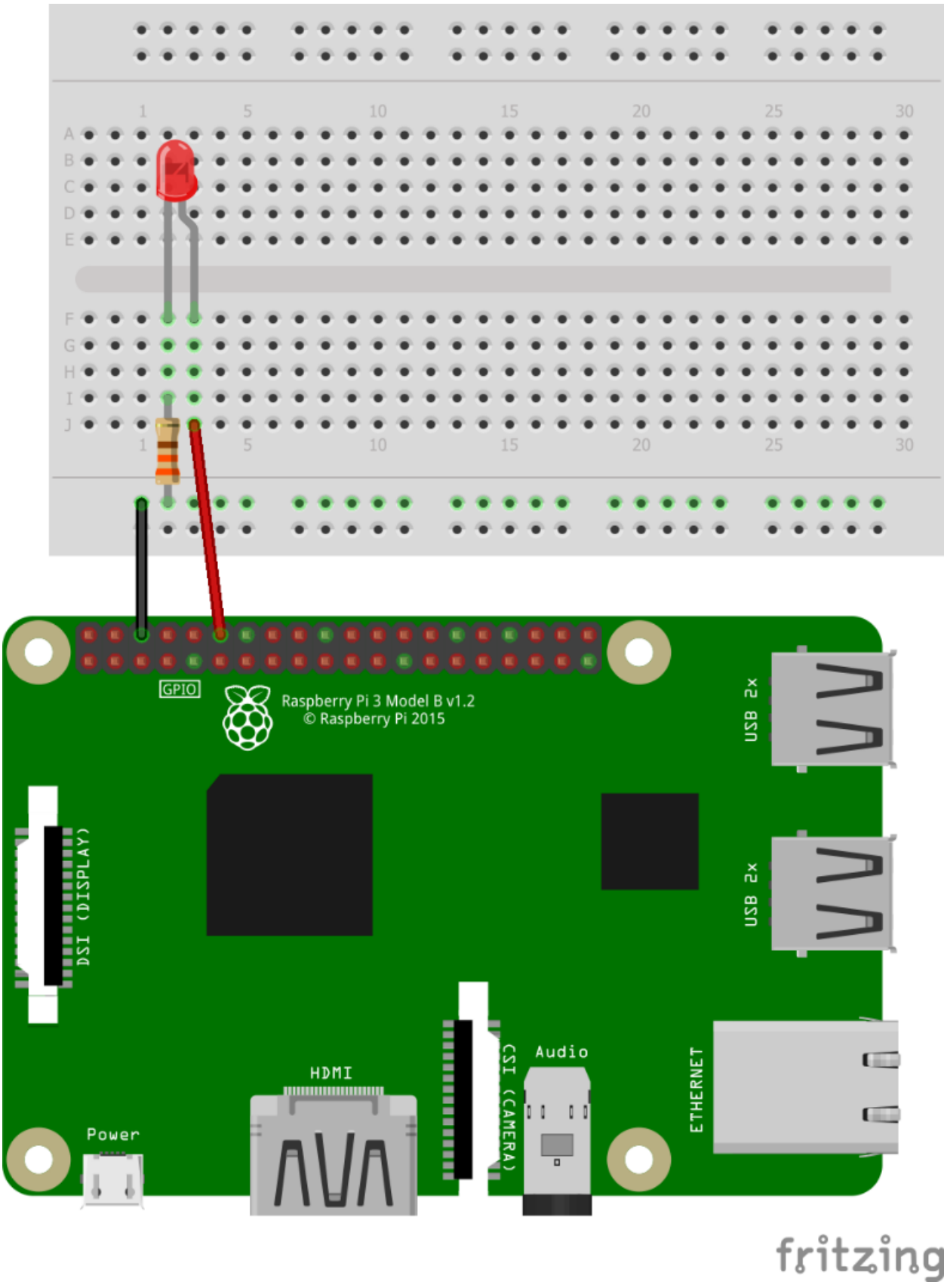

94%
23:18
Project Settings
How it Works
HOME SCREEN SHORTCUT
Add Shortcut
Your Launcher app may not support adding shortcuts
DEVICES
LED Controller
Raspberry Pi A/B (Rev2) (WiFi)
AUTH TOKENS
Email all
Copy all
THEME
DARK
LIGHT
KEEP SCREEN ALWAYS ON
OFF
ON

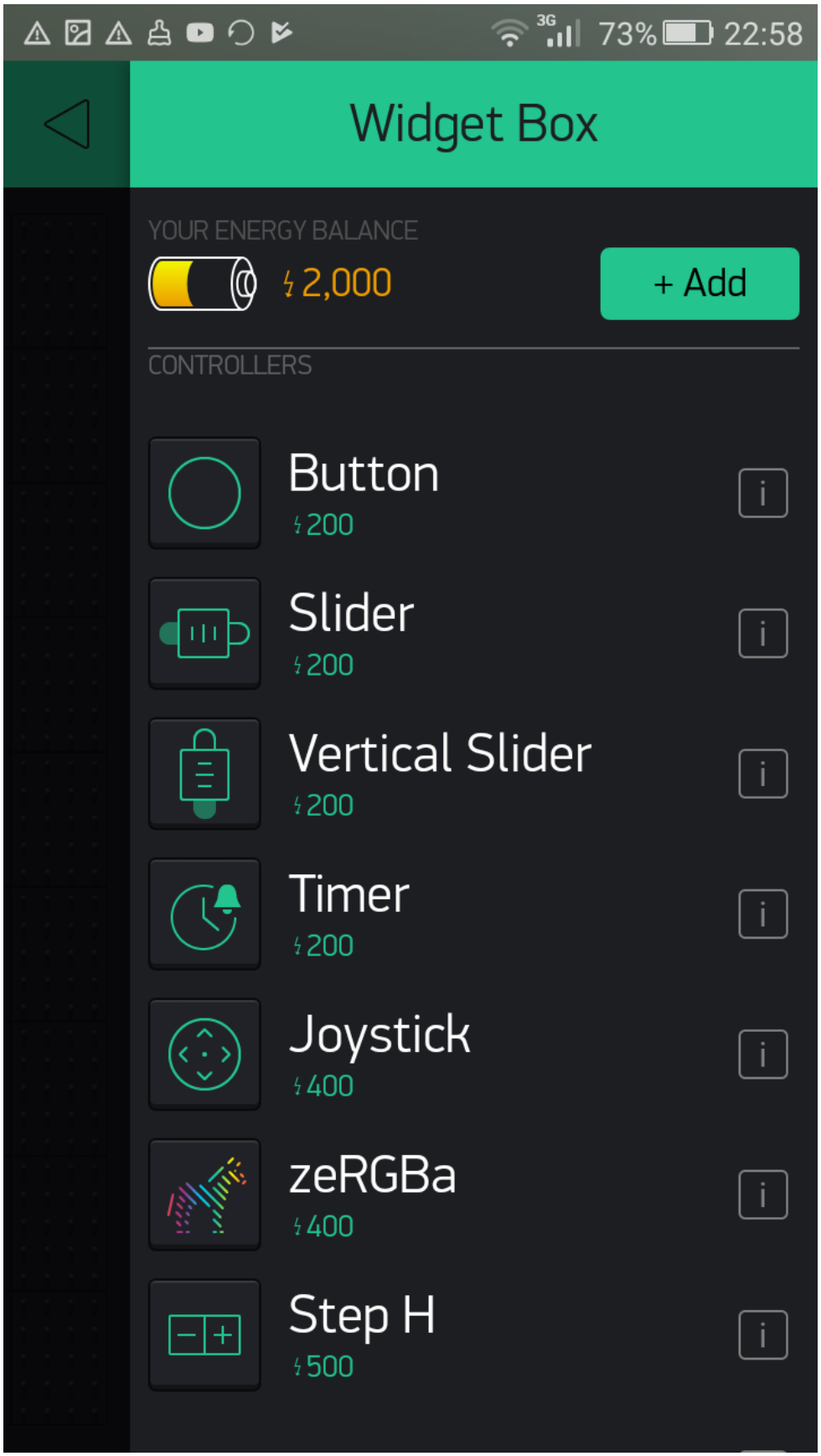

R
(-)
G
B

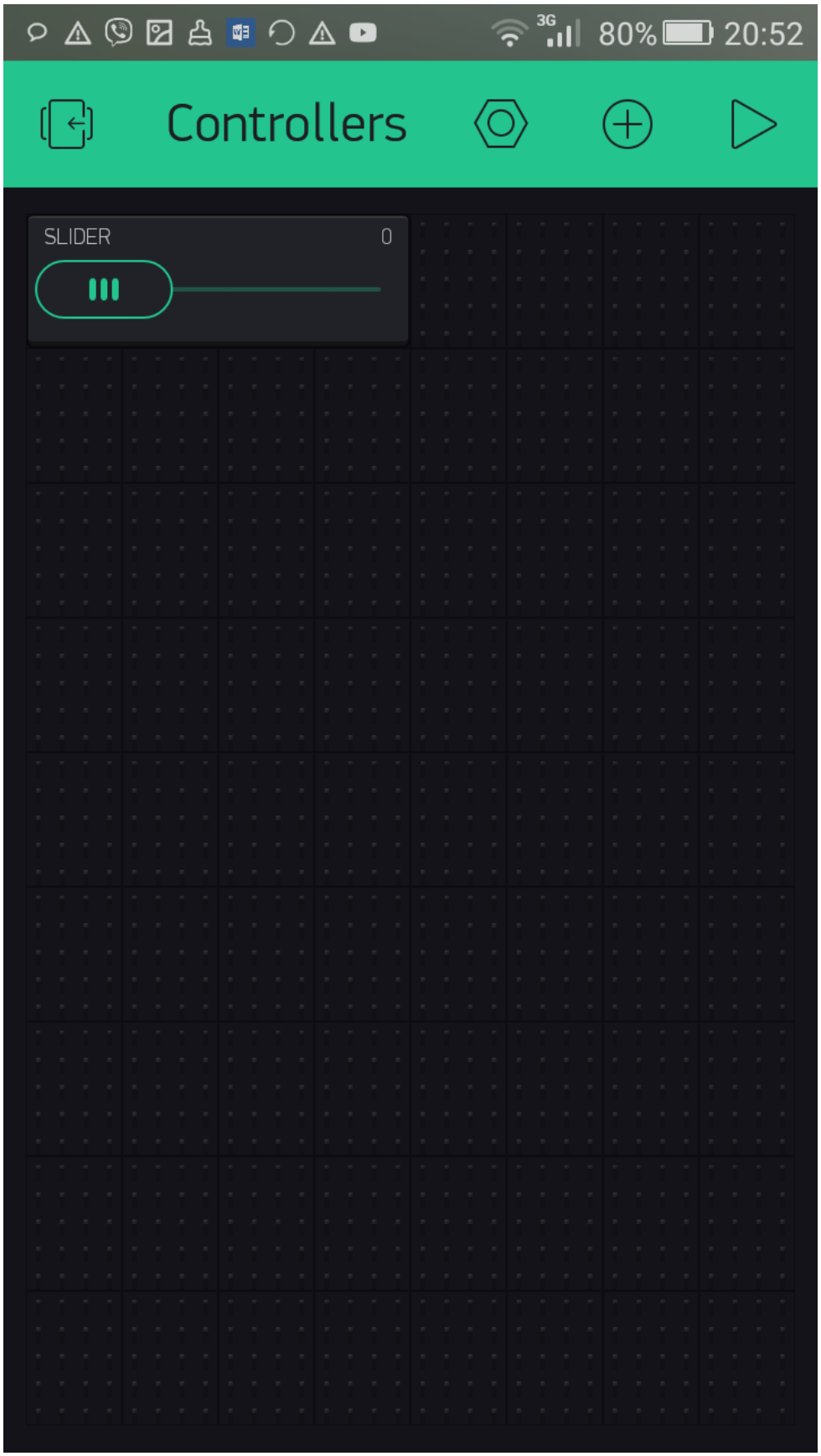

RED
BLUE
GND
GREEN
GPIO
Raspberry Pi 3 Model B v1.2
© Raspberry Pi 2015
USB 2x

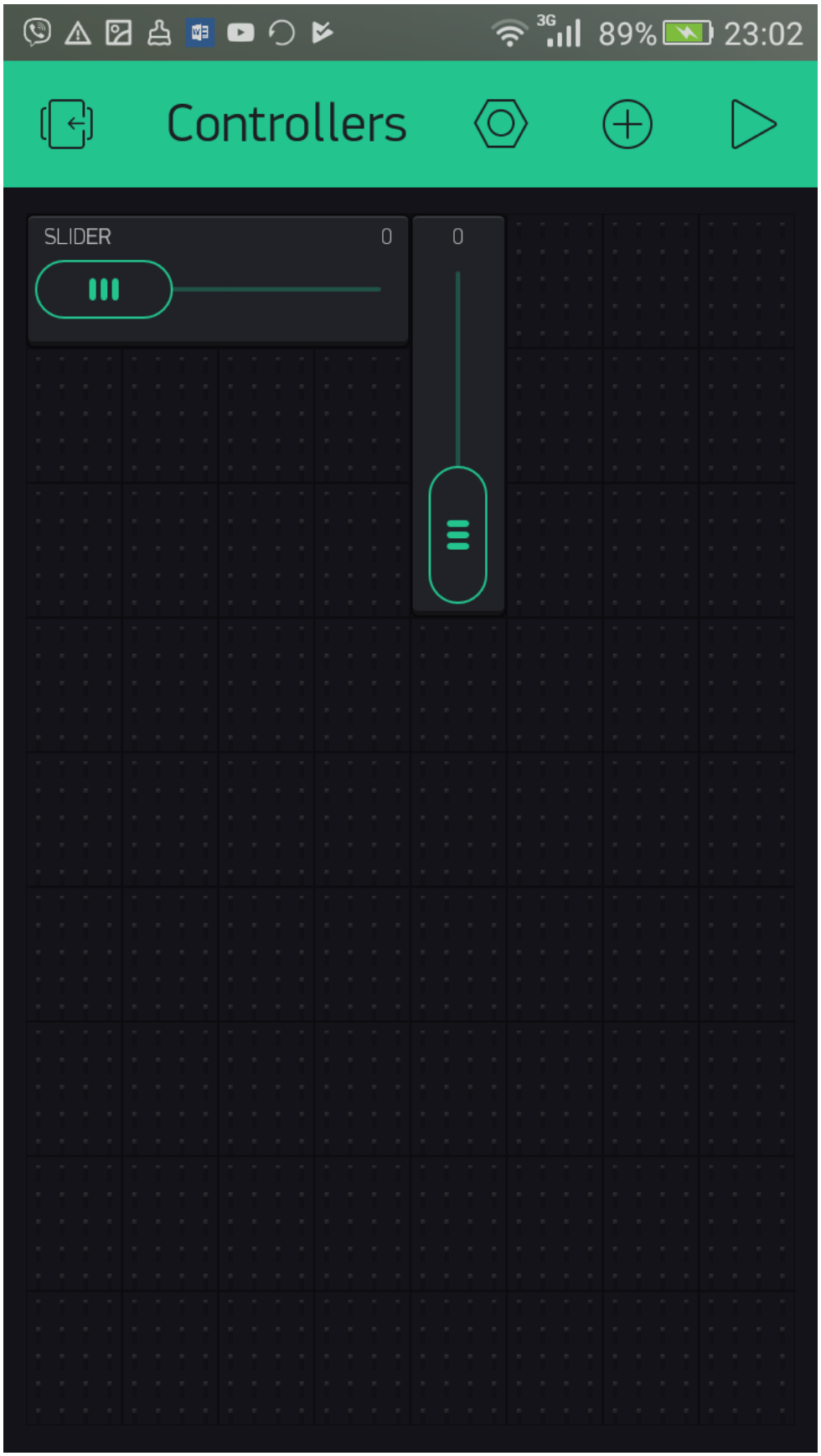

94%
23:18
My Devices
MY DEVICES
LED Controller
Raspberry Pi A/B (Rev2) (WiFi)
New Device
MY TAGS
New Tag

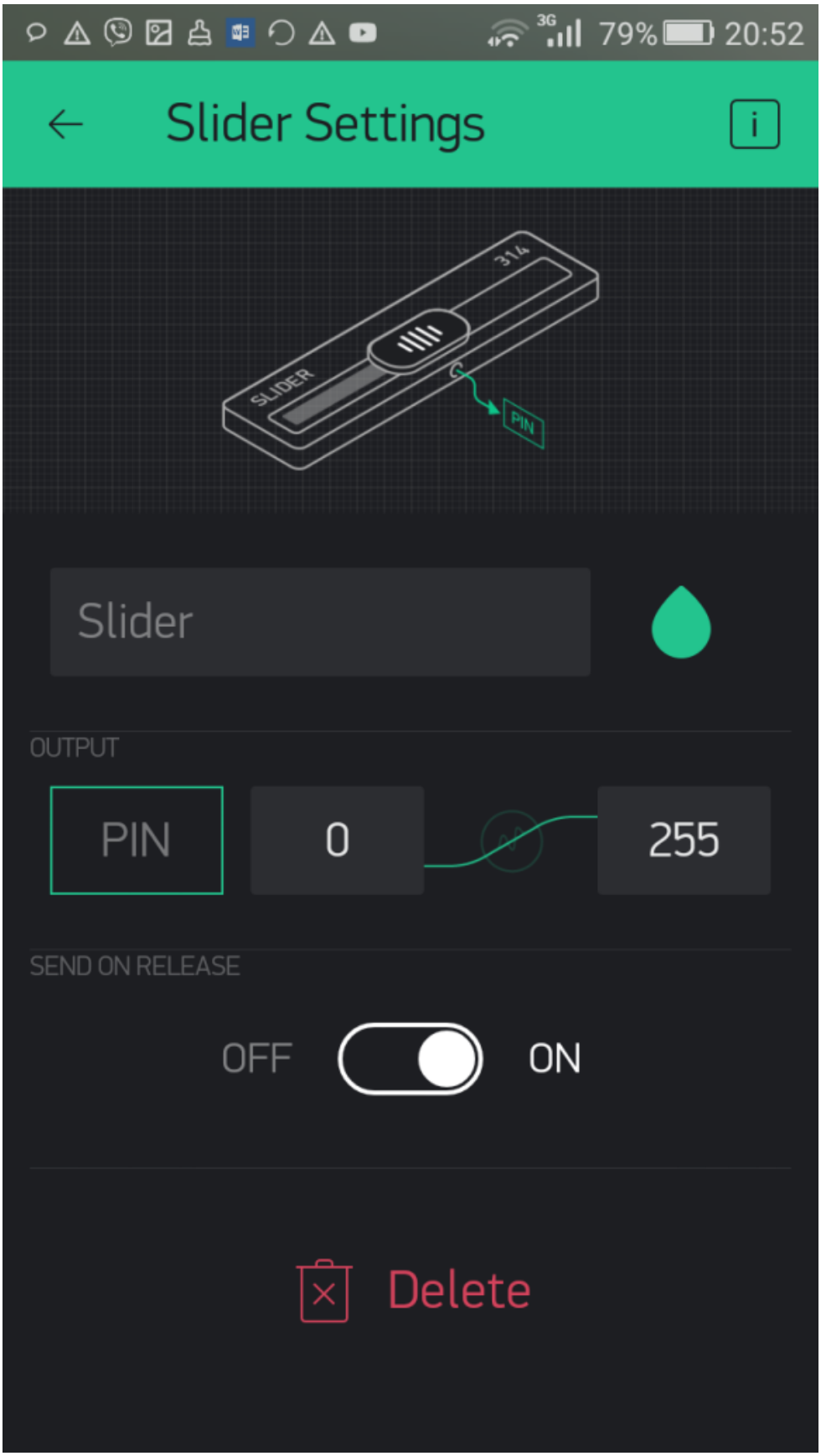

94%
23:18
My Devices
Controllers
HARDWARE MODEL
Raspberry Pi A/B (Rev2)
CONNECTION TYPE
WiFi
Controllers
Controller
Controlled
Done

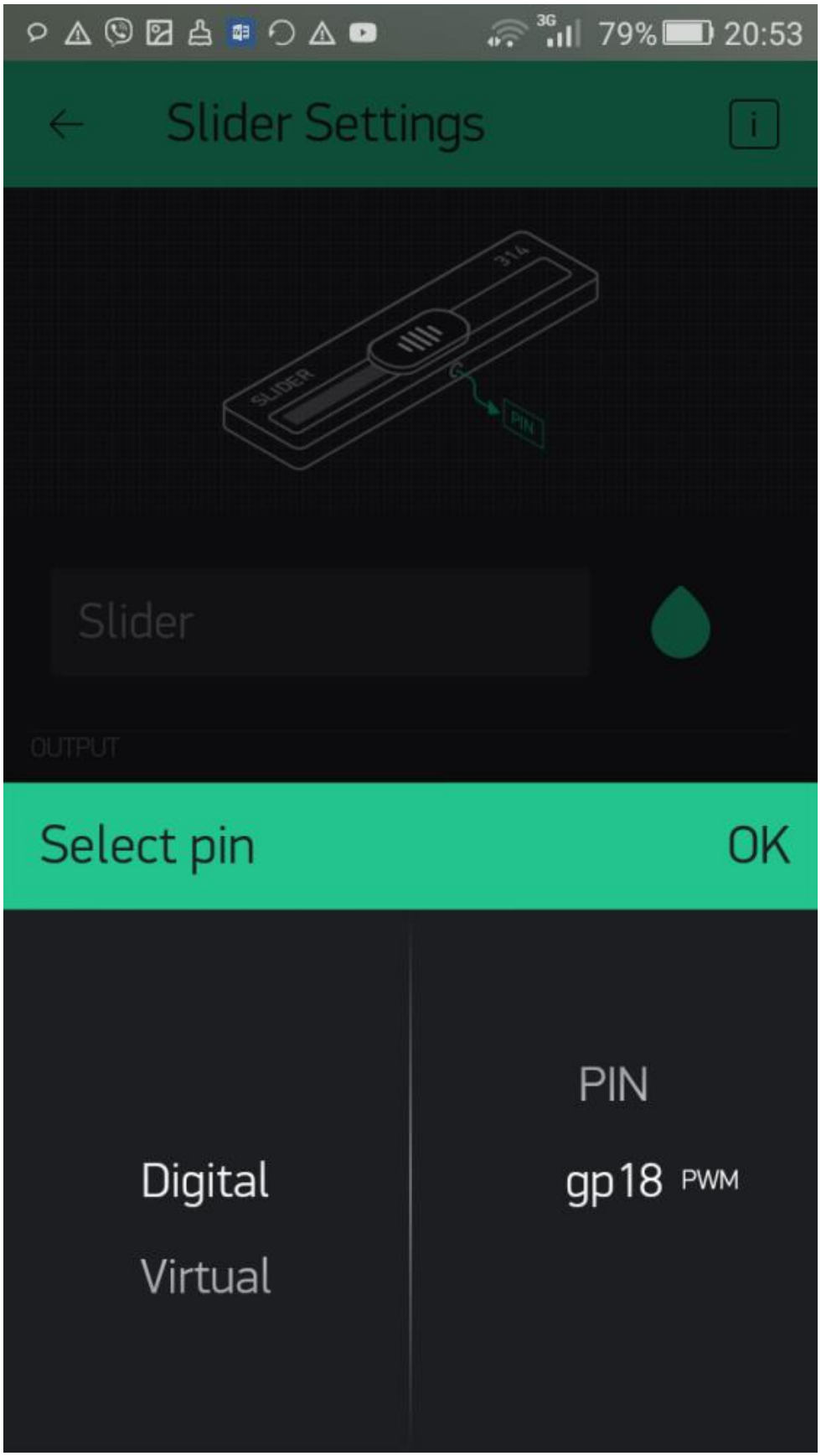

GPIO
Raspberry Pi 3 Model B v1.2
© Raspberry Pi 2015
USB 2x
USB 2x
DSI (DISPLAY)
CSI (CAMERA)
Audio
ETHERNET
HDMI
Power
fritzing

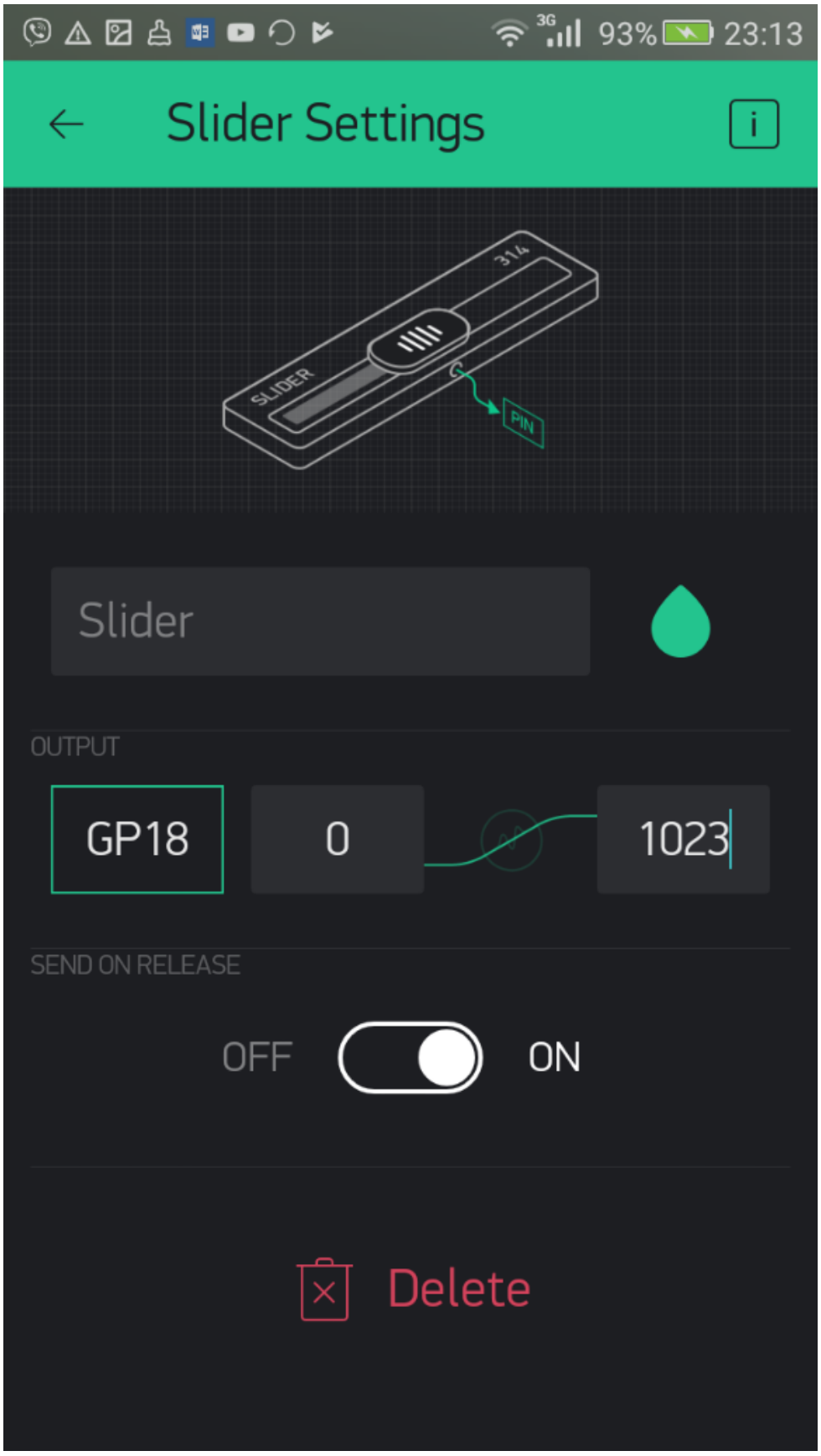

73%
22:58
Widget Box
YOUR ENERGY BALANCE
2,000
+ Add
CONTROLLERS
Button
200
Slider
200
Vertical Slider
200
Timer
200
Joystick
400
zeRGBa
400
Step H
500

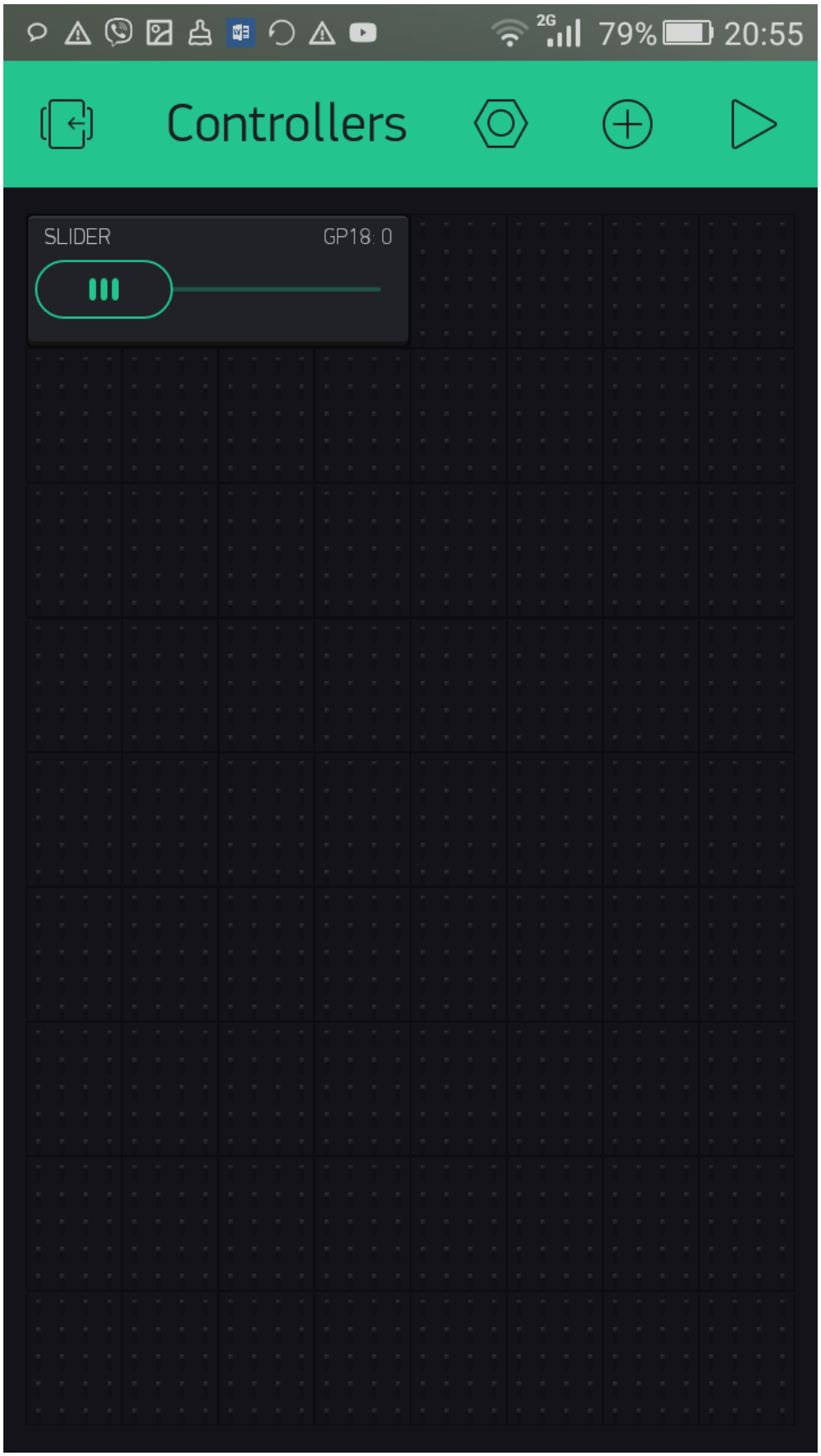

80%
20:52
Controllers
SLIDER
0

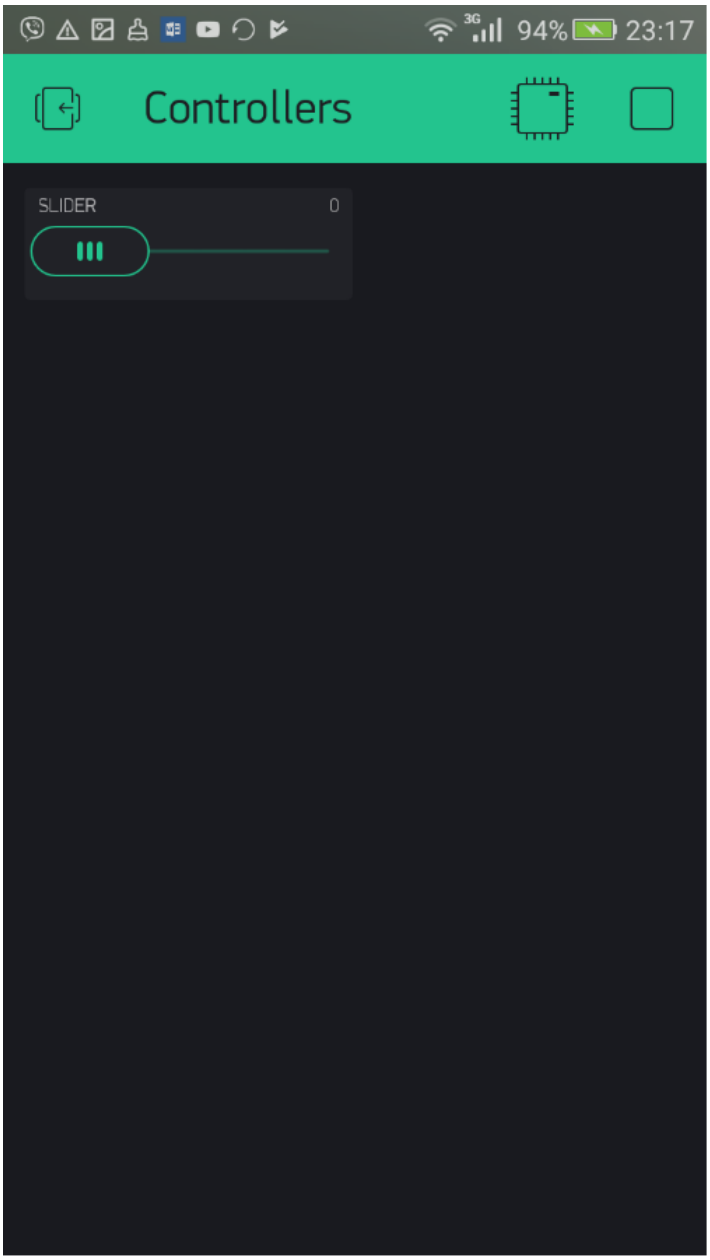

89%
23:02
Controllers
SLIDER
0
0

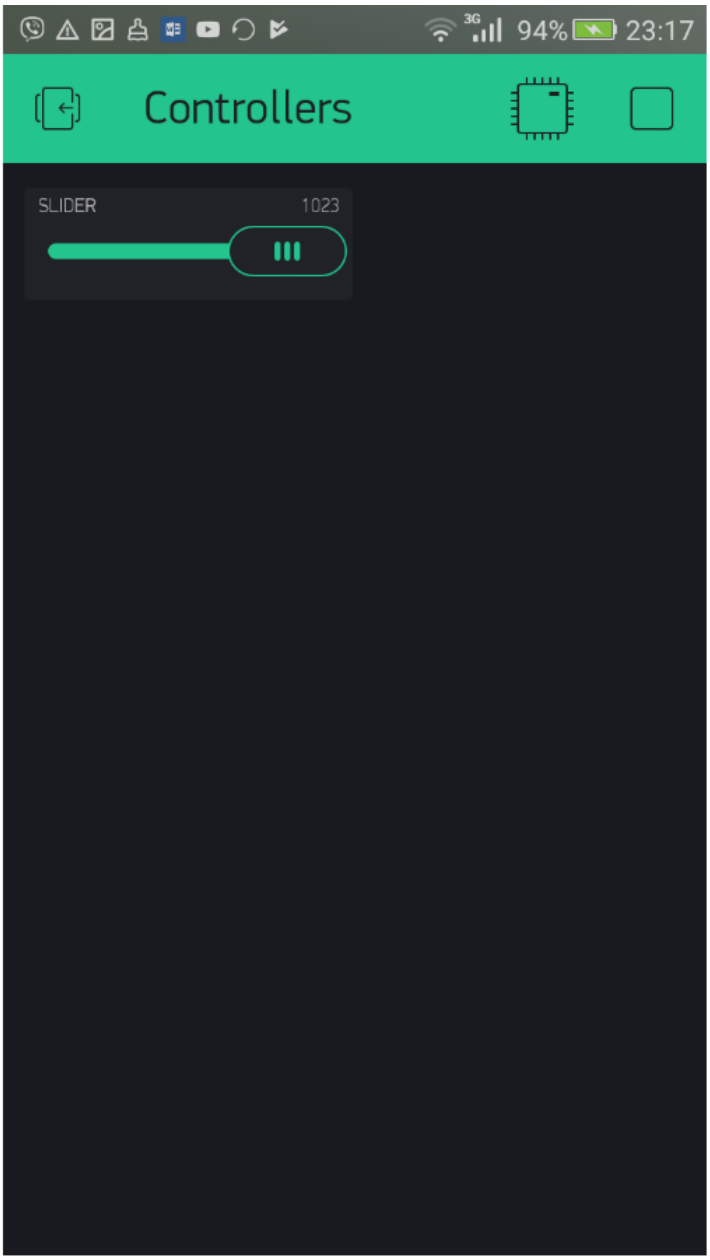

79%
20:52
Slider Settings
SLIDER
PIN
Slider
OUTPUT
PIN
0
255
SEND ON RELEASE
OFF
ON
Delete


79%
20:53
Slider Settings
SLIDER
PIN
Slider
OUTPUT
Select pin
OK
Digital
Virtual
PIN
gp18 PWM


93% 23:13
Slider Settings
SLIDER
PIN
Slider
OUTPUT
GP18
0
1023
SEND ON RELEASE
OFF
ON
Delete

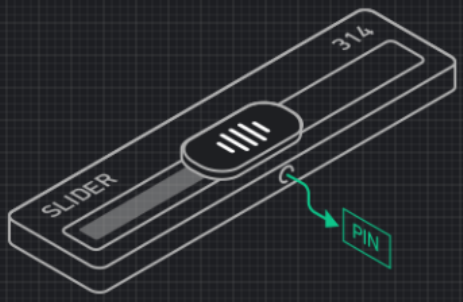

79%
20:55
Controllers
SLIDER
GP18: 0


94%
23:17
Controllers
SLIDER
0


94%
23:17
Controllers
SLIDER
1023

78% 23:05

Slider Settings



Slider

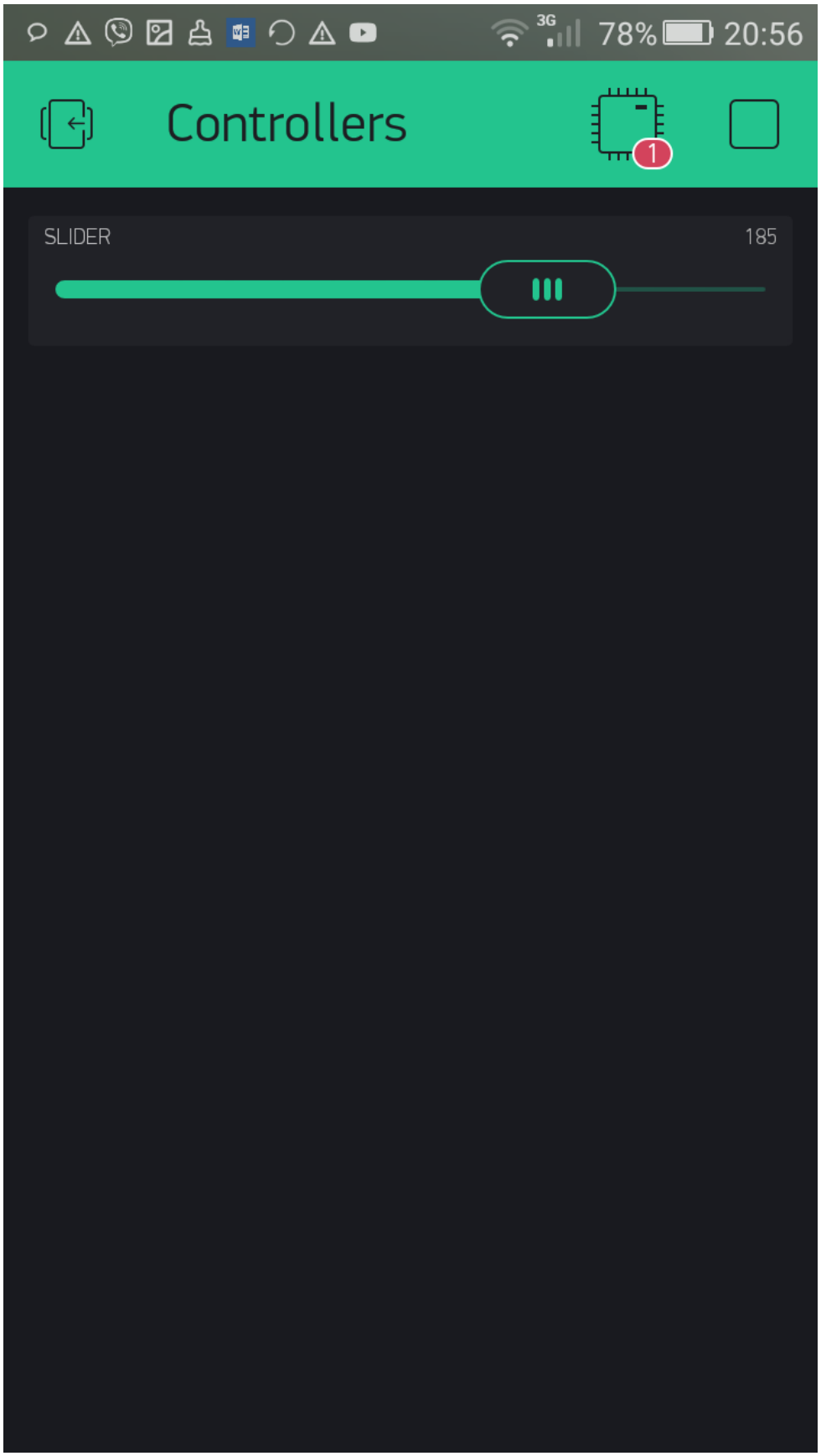
OUTPUT

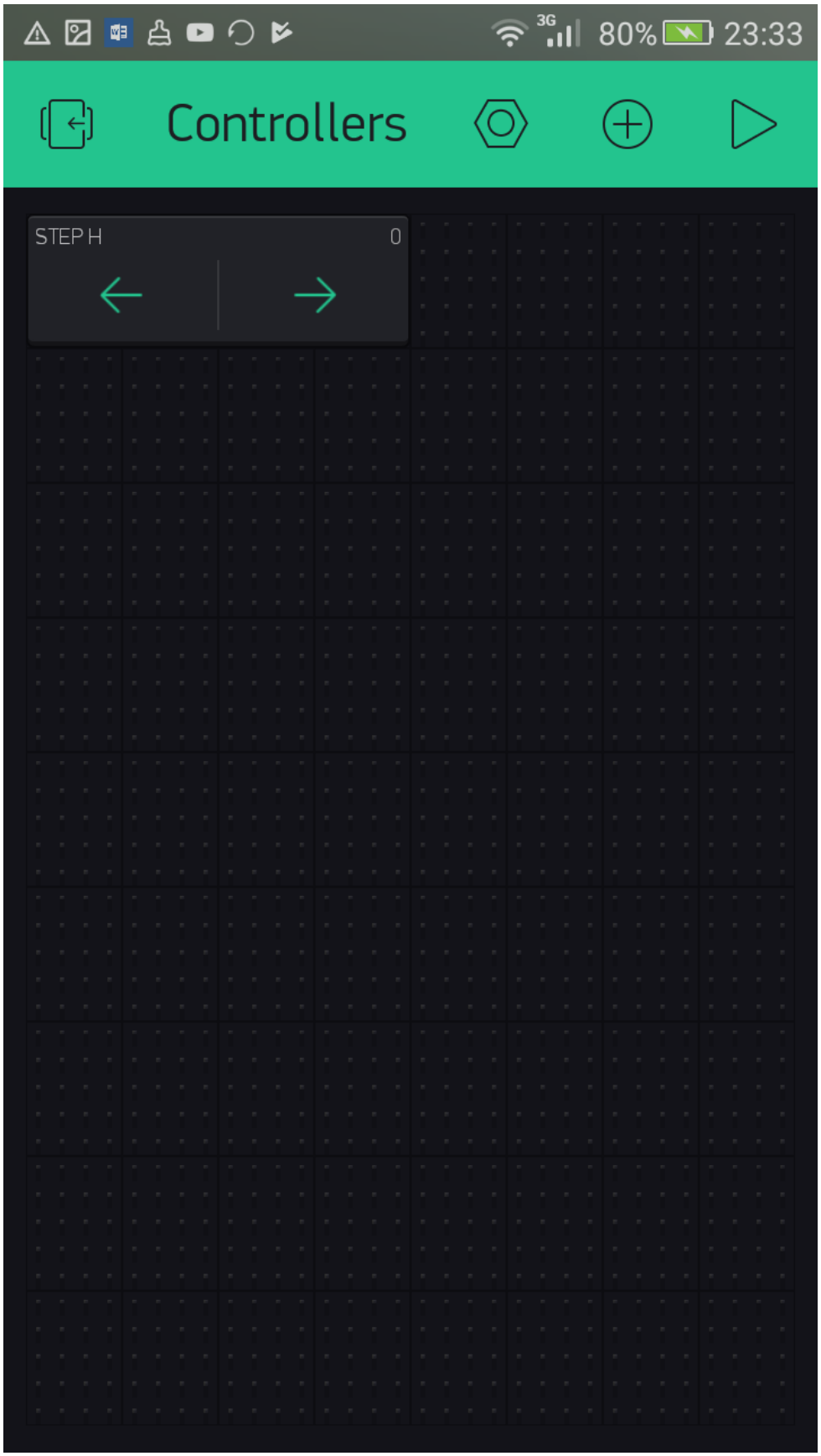
V1 | 0 | 1023

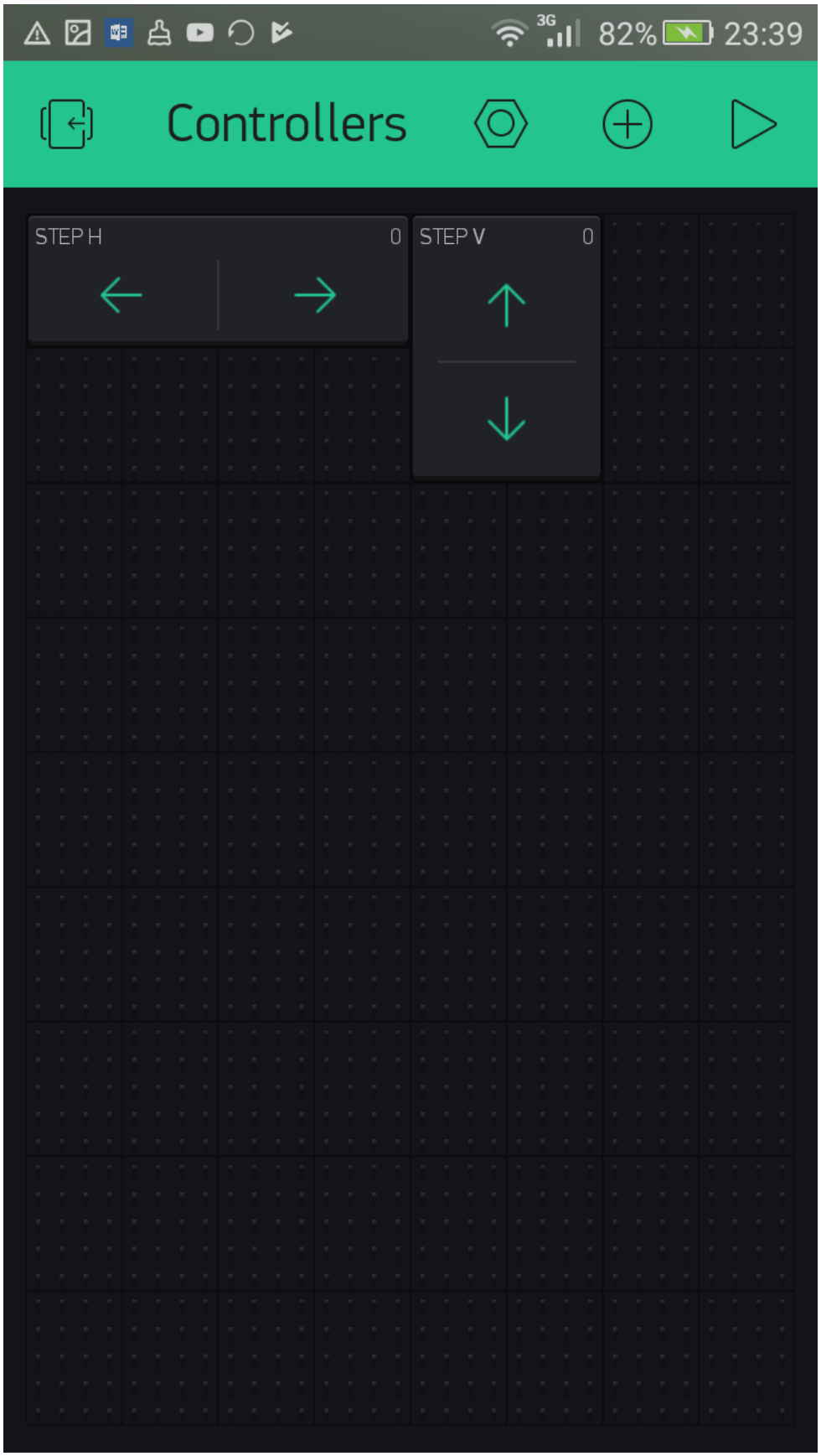
SEND ON RELEASE

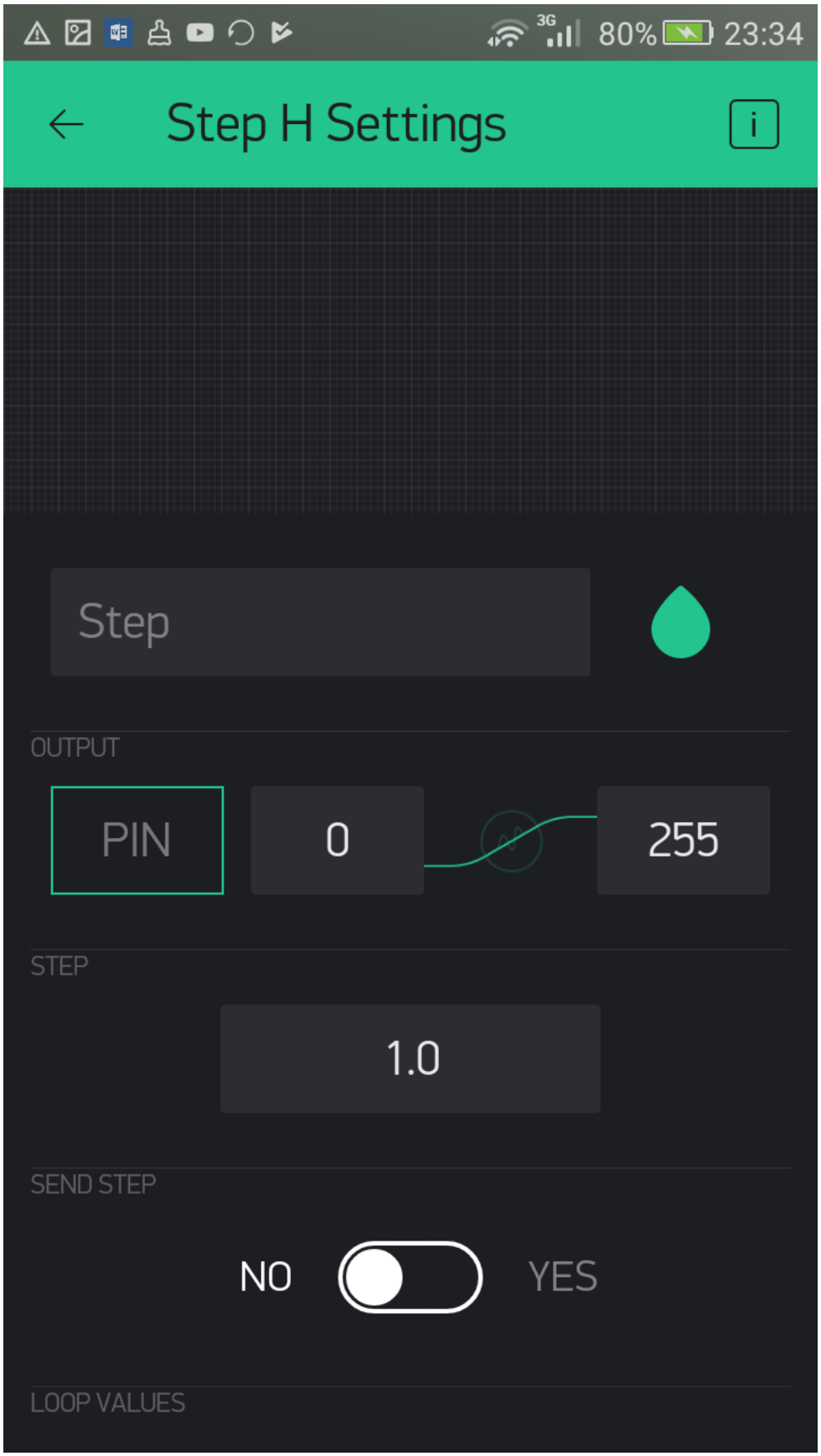
OFF ON

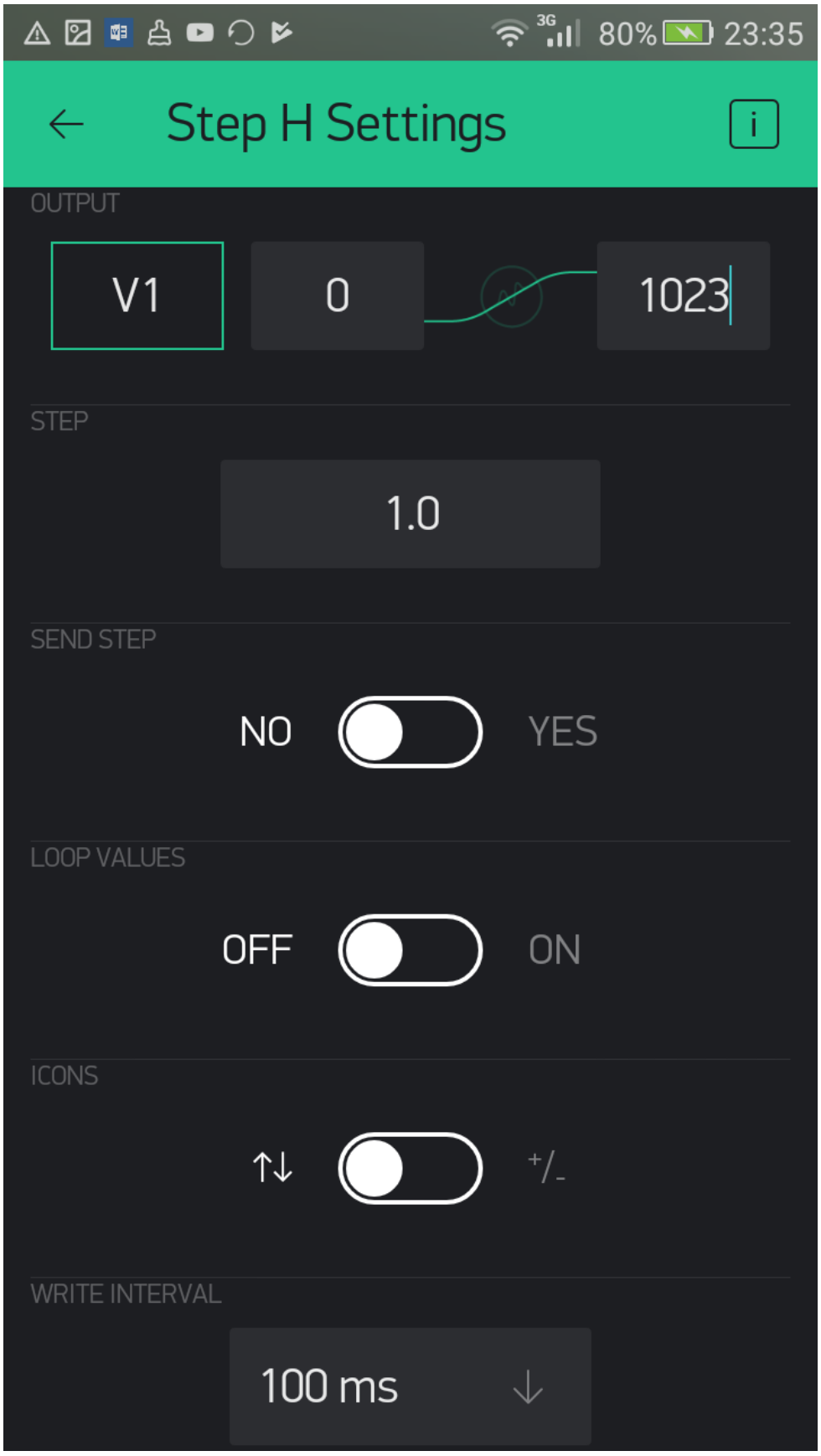
Delete

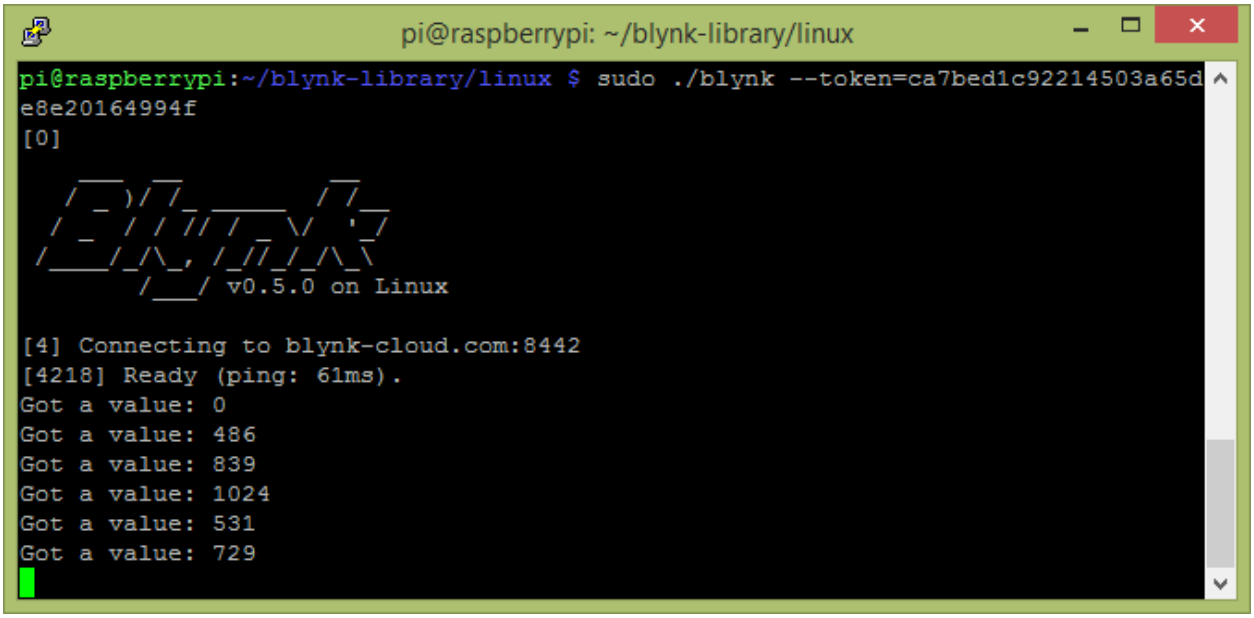

78%
20:56
Controllers
1
SLIDER
185

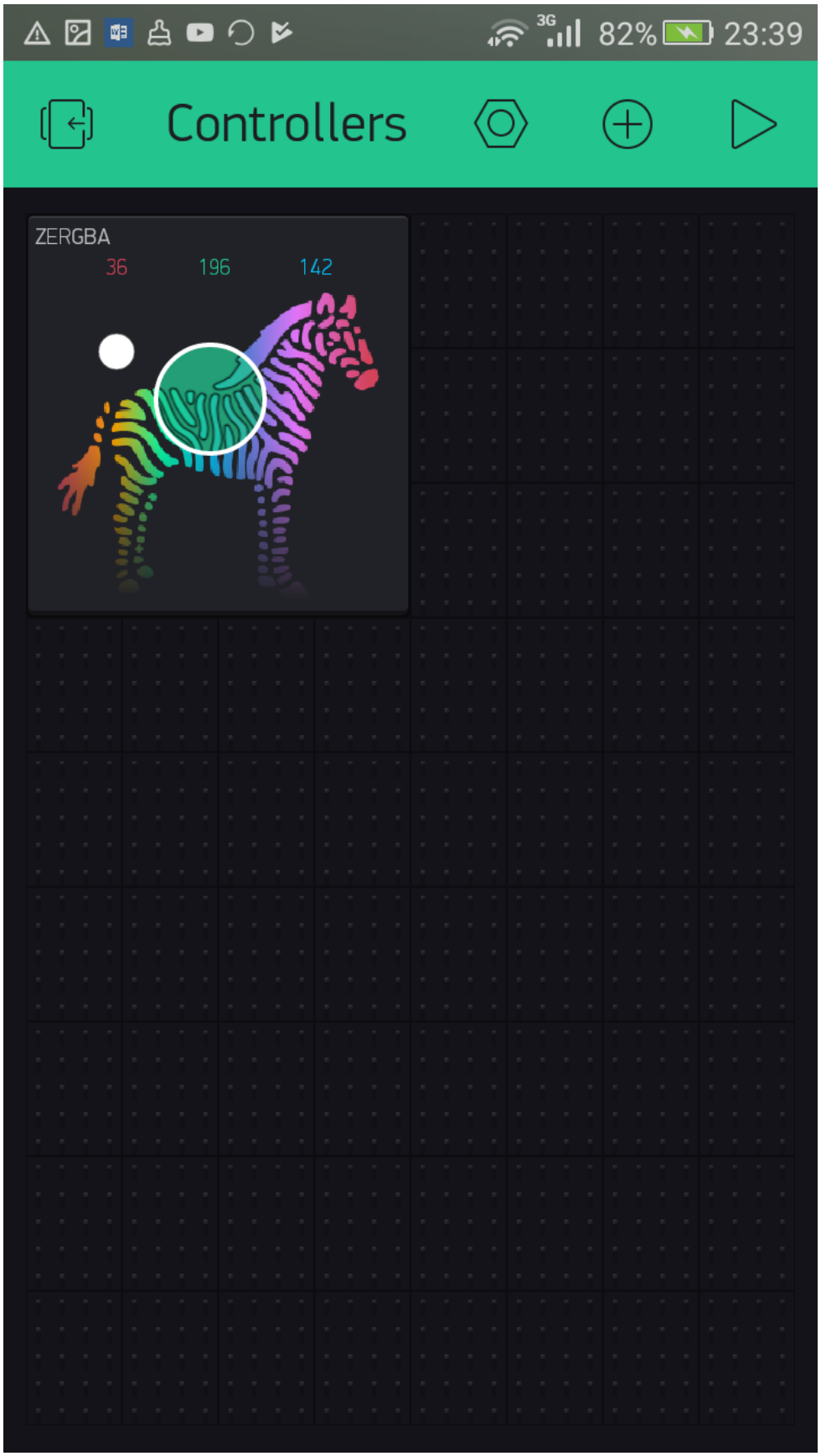

80%
23:33
Controllers
STEP H
0

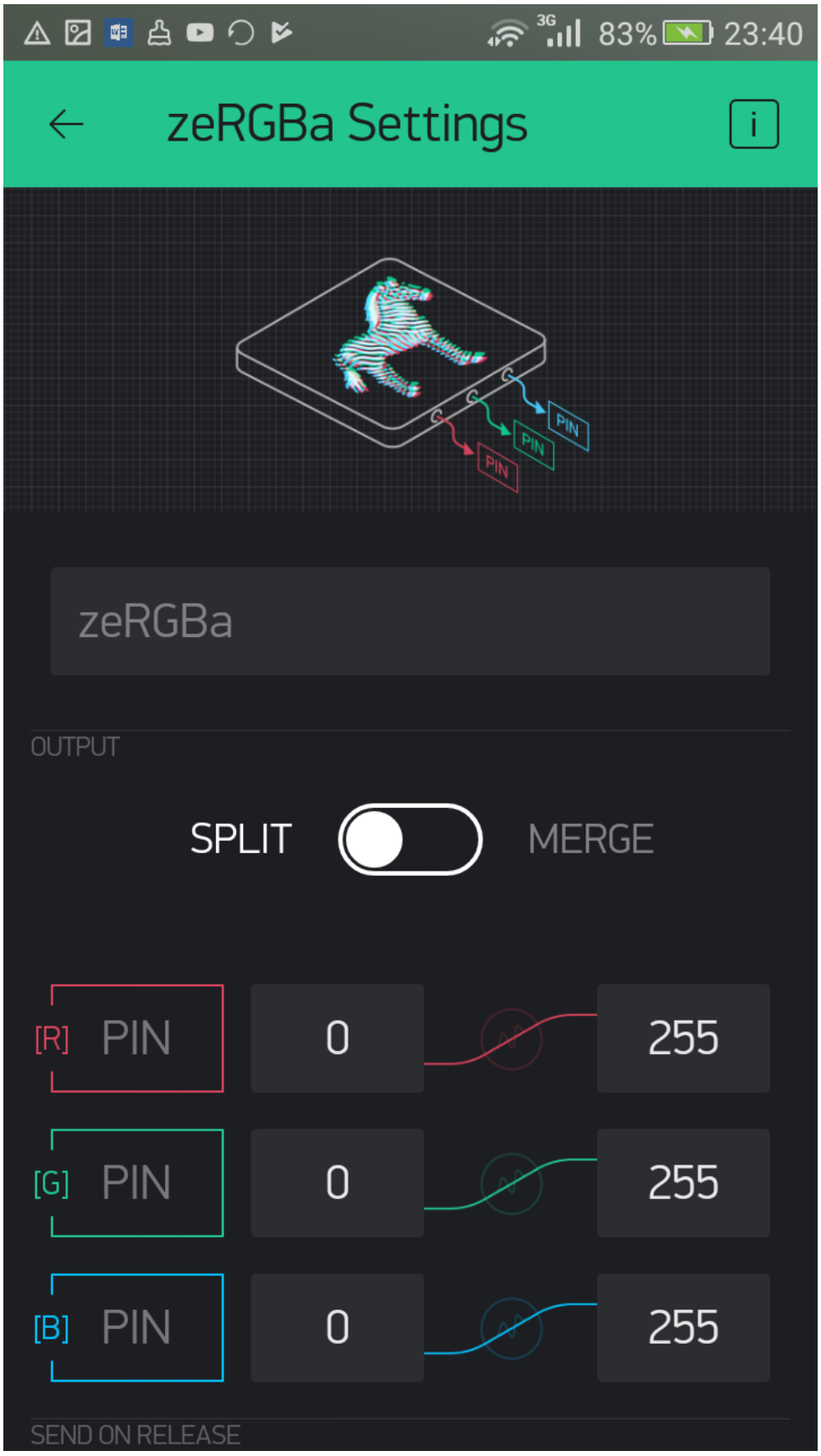

82%
23:39
Controllers
STEP H
0
STEP V
0

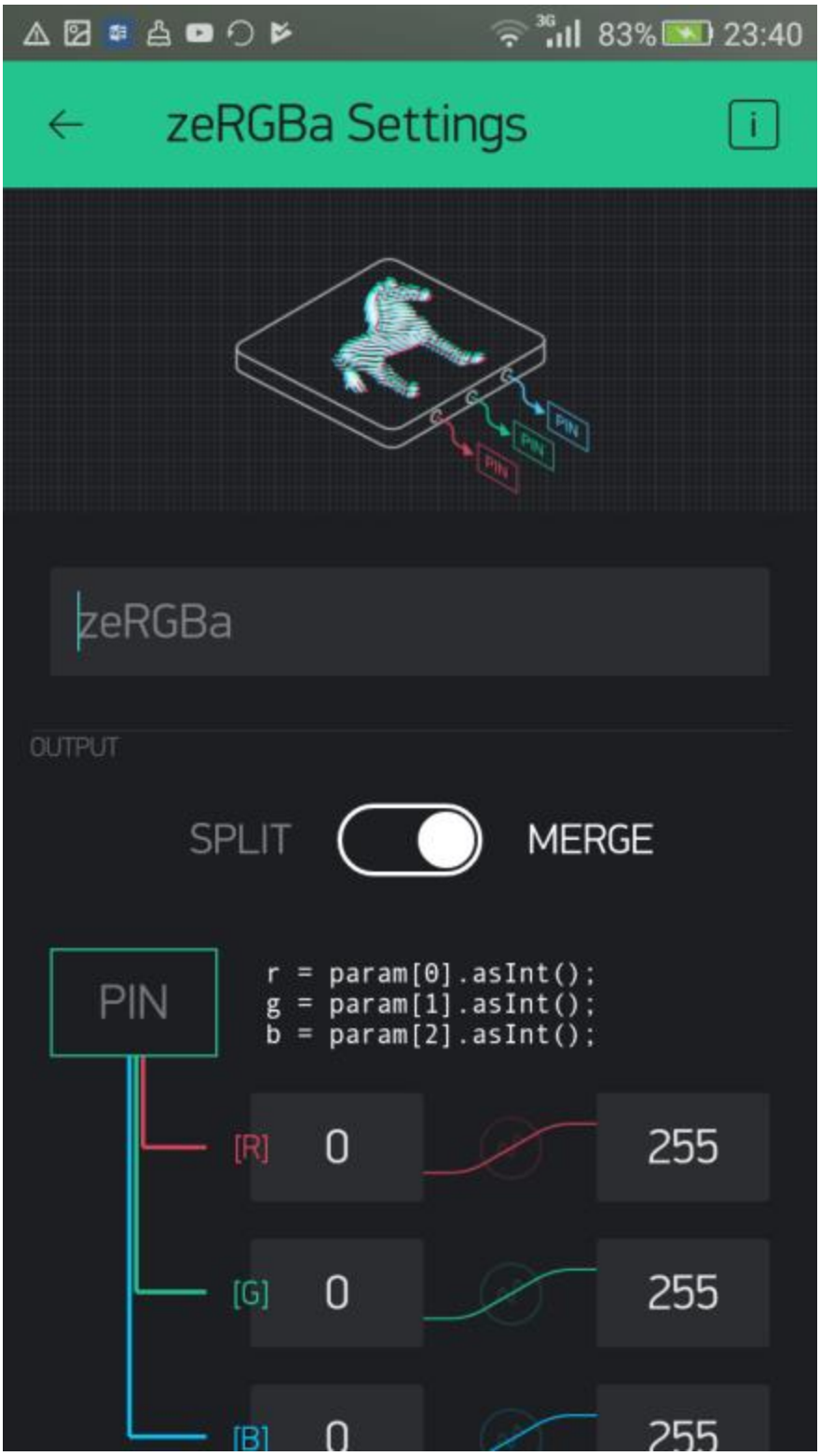

80%
23:34
Step H Settings
Step
OUTPUT
PIN
0
255
STEP
1.0
SEND STEP
NO
YES
LOOP VALUES

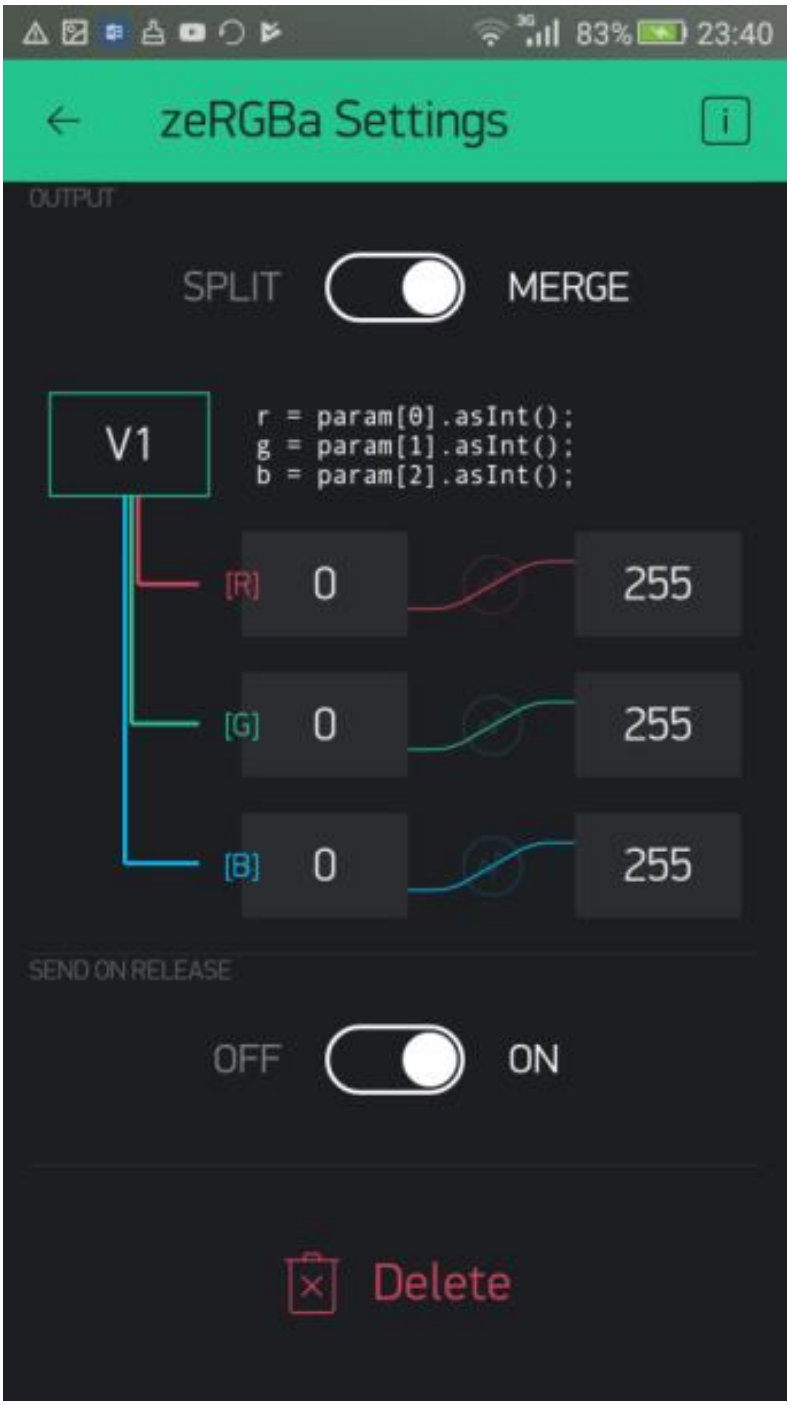

80%
23:35
Step H Settings
OUTPUT
V1
0
1023
STEP
1.0
SEND STEP
NO
YES
LOOP VALUES
OFF
ON
ICONS
+/-
WRITE INTERVAL
100 ms

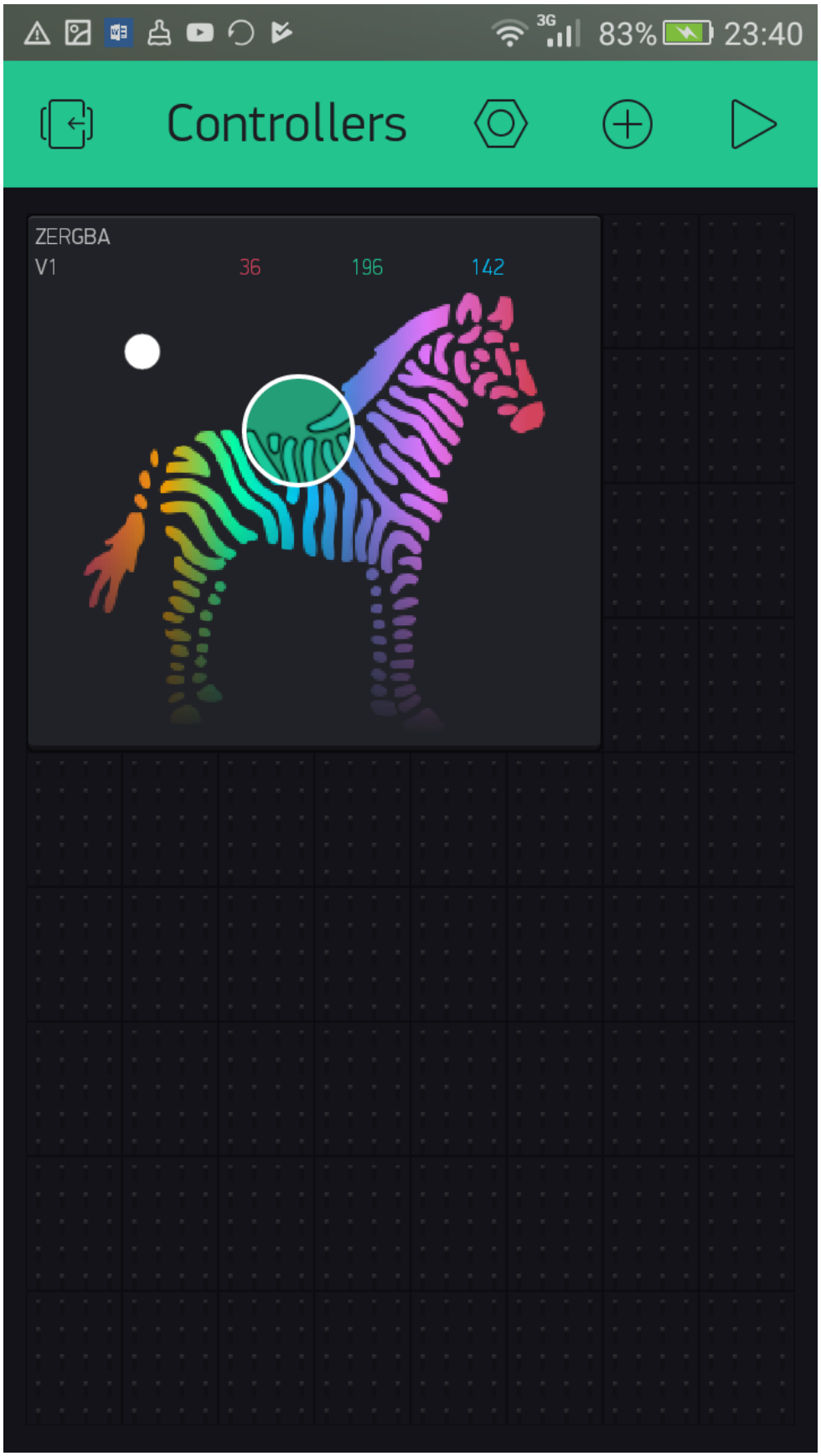

pi@raspberrypi: ~/blynk-library/linux
pi@raspberrypi:~/blynk-library/linux $ sudo ./blynk --token=ca7bed1c92214503a65d
e8e20164994f
[0]
v0.5.0 on Linux
[4] Connecting to blynk-cloud.com:8442
[4218] Ready (ping: 61ms).
Got a value: 0
Got a value: 486
Got a value: 839
Got a value: 1024
Got a value: 531
Got a value: 729

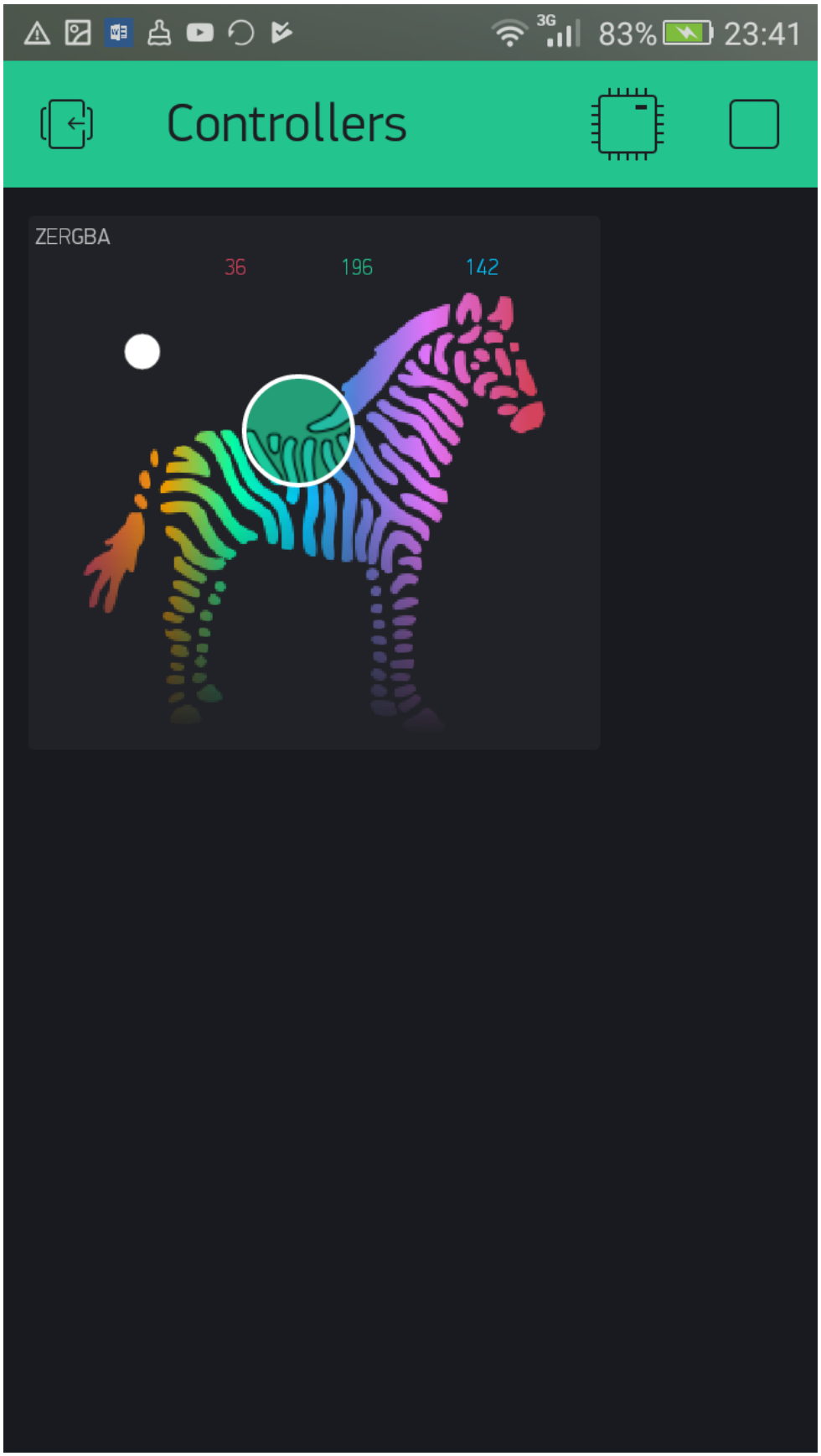

82%
23:39
Controllers
ZERGBA
36
196
142

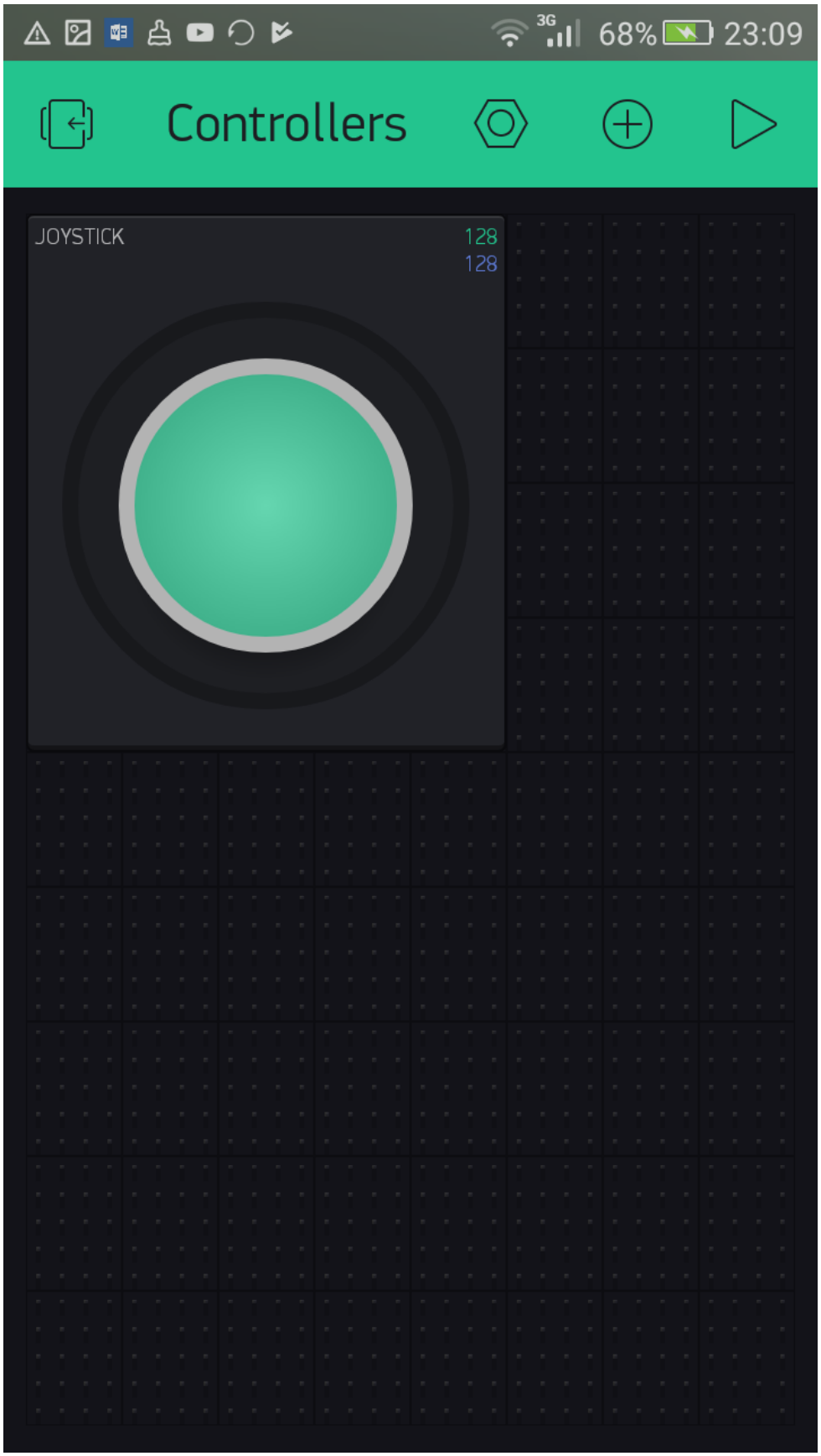

83%
23:40
zeRGBa Settings
PIN
PIN
PIN
zeRGBa
OUTPUT
SPLIT
MERGE
[R] PIN
0
255
[G] PIN
0
255
[B] PIN
0
255
SEND ON RELEASE


83% 23:40
zeRGBa Settings
PIN
PIN
PIN
zeRGBa
OUTPUT
SPLIT
MERGE
PIN
r = param[0].asInt();
g = param[1].asInt();
b = param[2].asInt();
[R] 0
255
[G] 0
255
[B] 0
255


83% 23:40
zeRGBa Settings
OUTPUT
SPLIT
MERGE
V1
r = param[0].asInt();
g = param[1].asInt();
b = param[2].asInt();
[R] 0
255
[G] 0
255
[B] 0
255
SEND ON RELEASE
OFF
ON
Delete

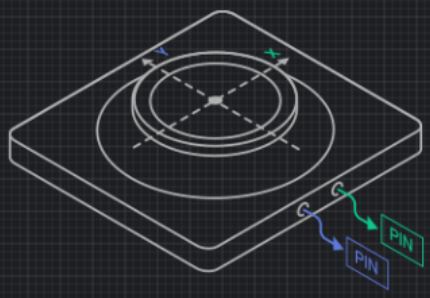

83%
23:40
Controllers
ZERGBA
V1
36
196
142


83%
23:41
Controllers
ZERGBA
36
196
142


68%
23:09
Controllers
JOYSTICK
128
128

68% 23:11

Joystick Settings



Joystick

OUTPUT

SPLIT MERGE

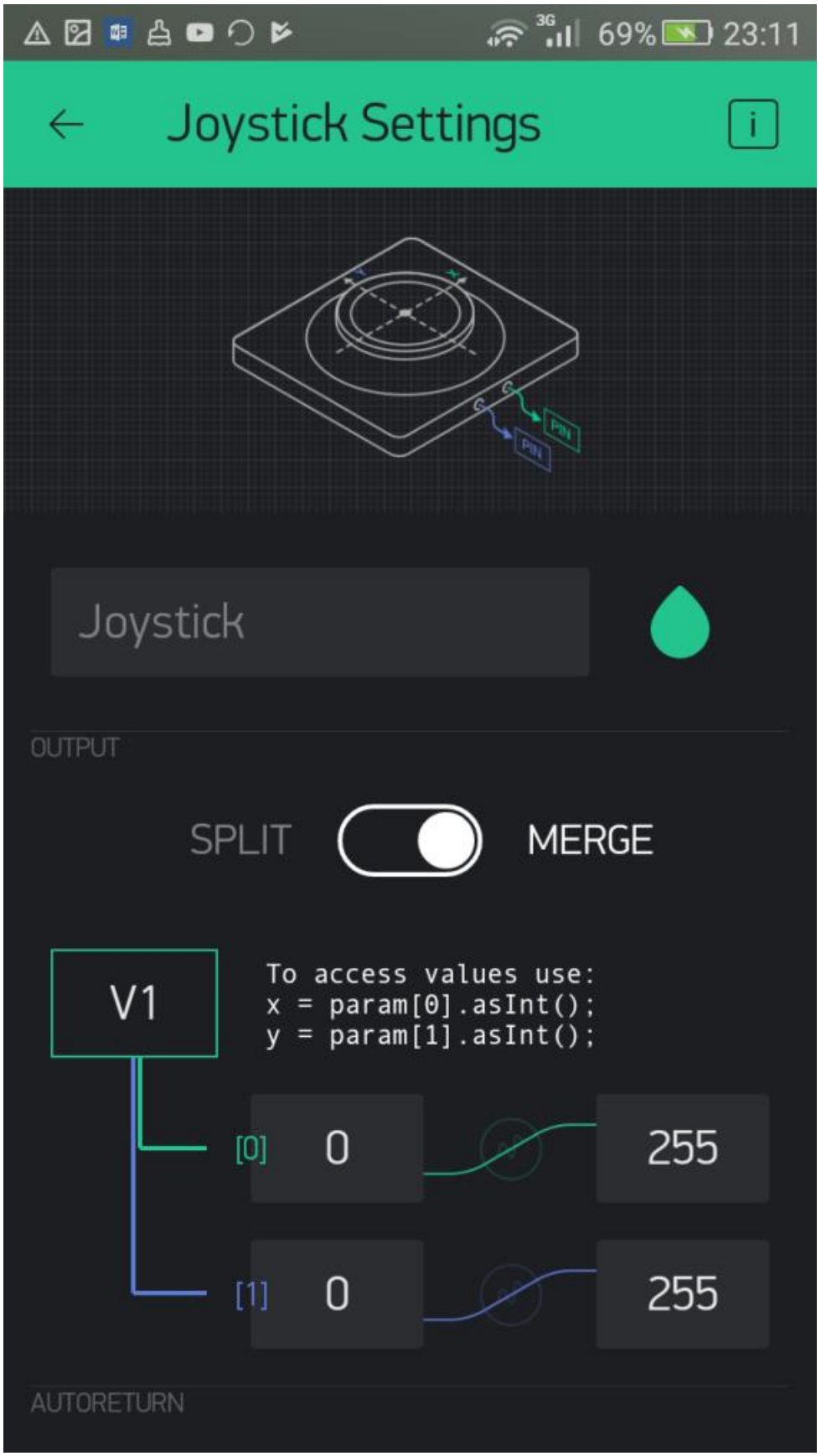
PIN

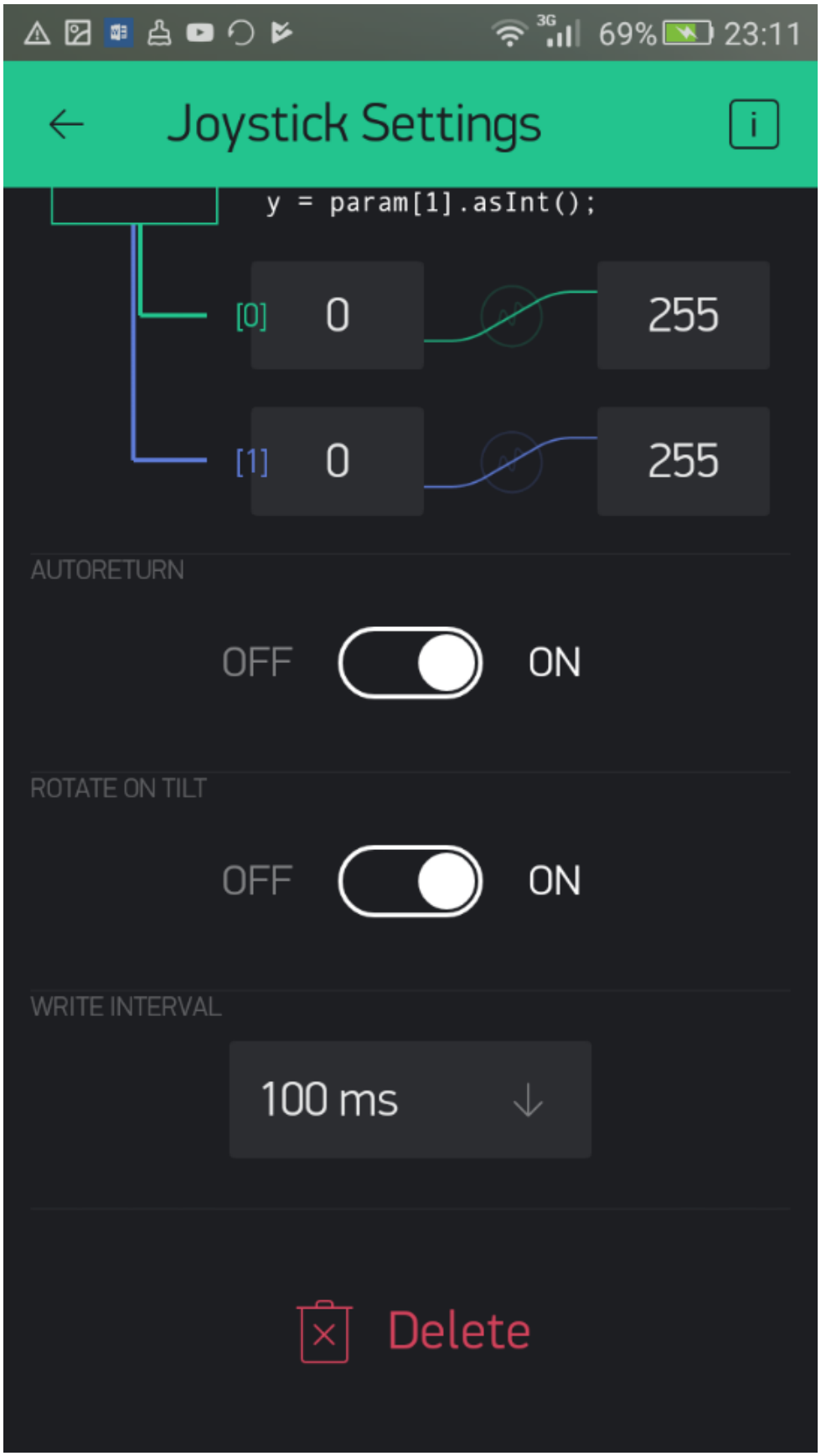
```
To access values use:
x = param[0].asInt();
y = param[1].asInt();
```

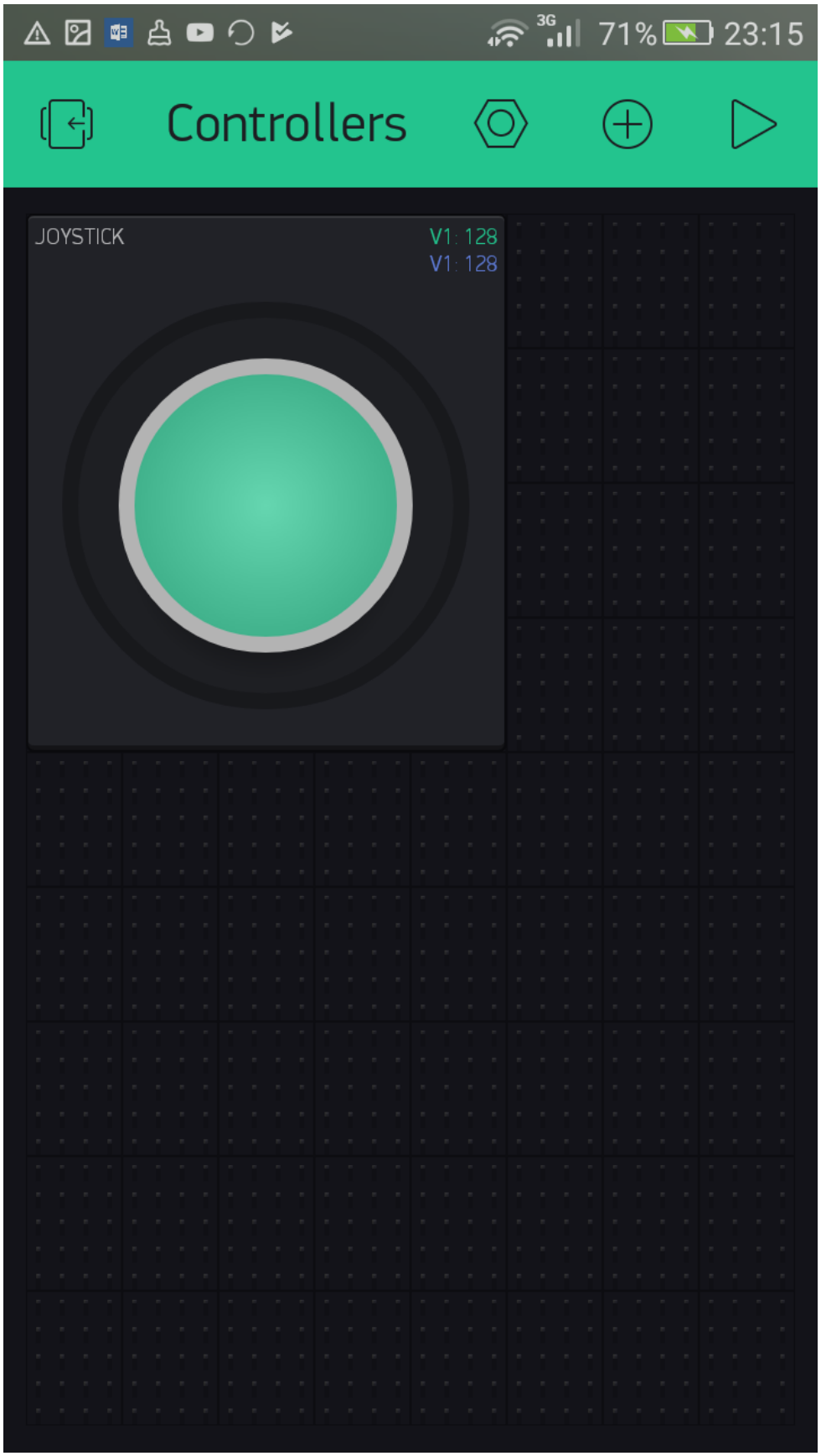
[0] 0 255

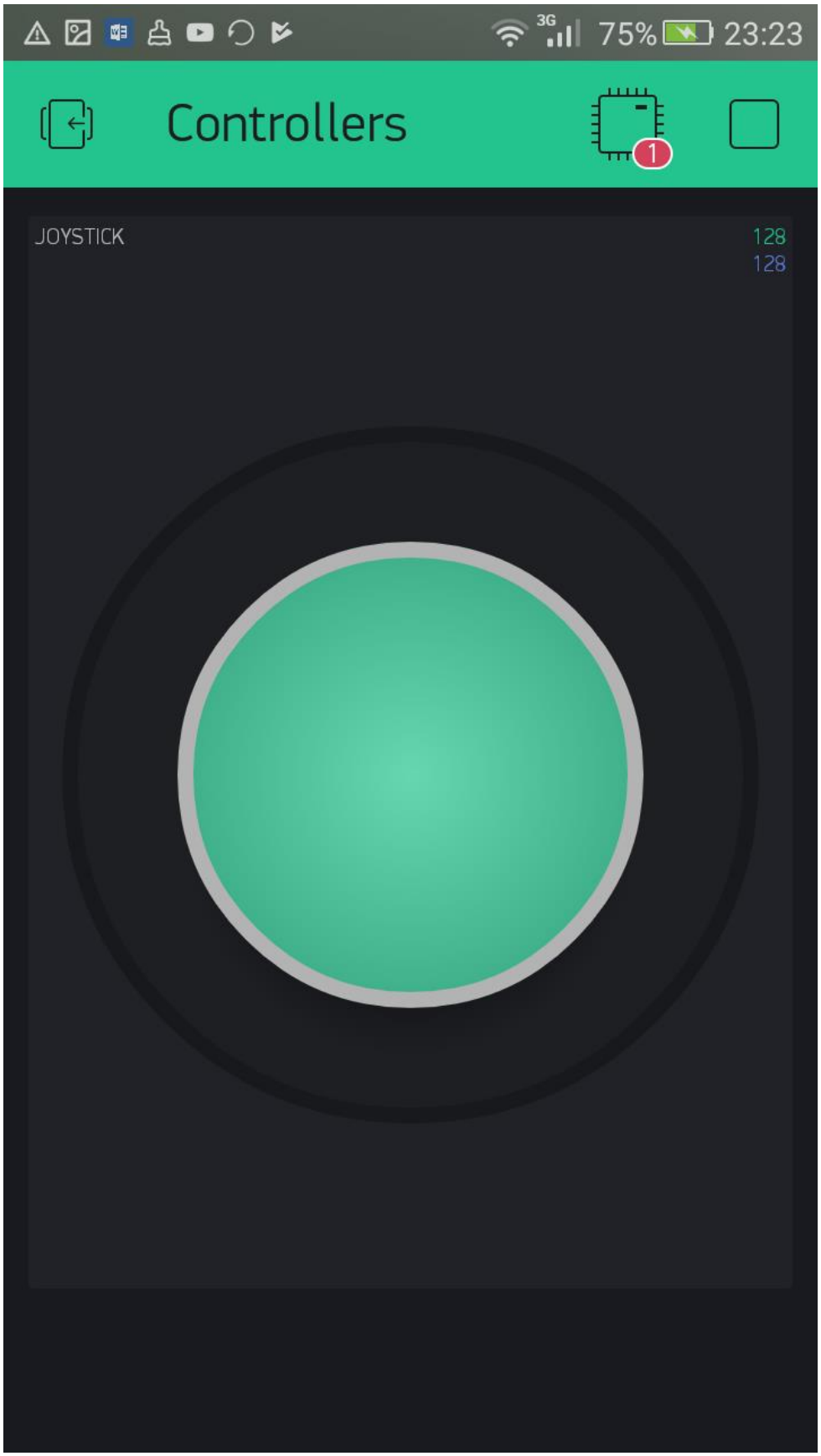
[1] 0 255

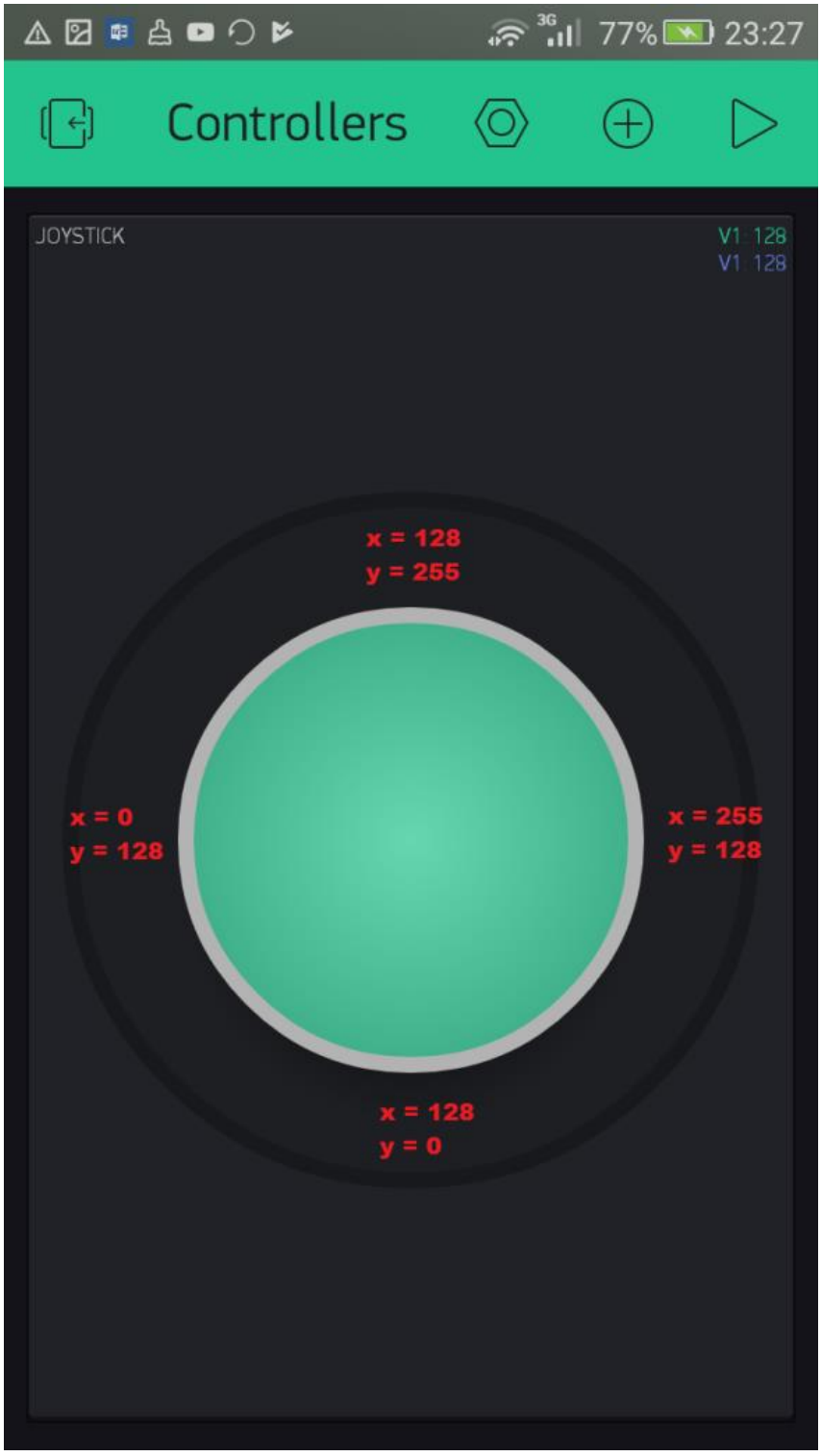
AUTORETURN


69%
23:11
Joystick Settings
PIN
PIN
Joystick
OUTPUT
SPLIT
MERGE
V1
To access values use:
x = param[0].asInt();
y = param[1].asInt();
[0]
0
255
[1]
0
255
AUTORETURN

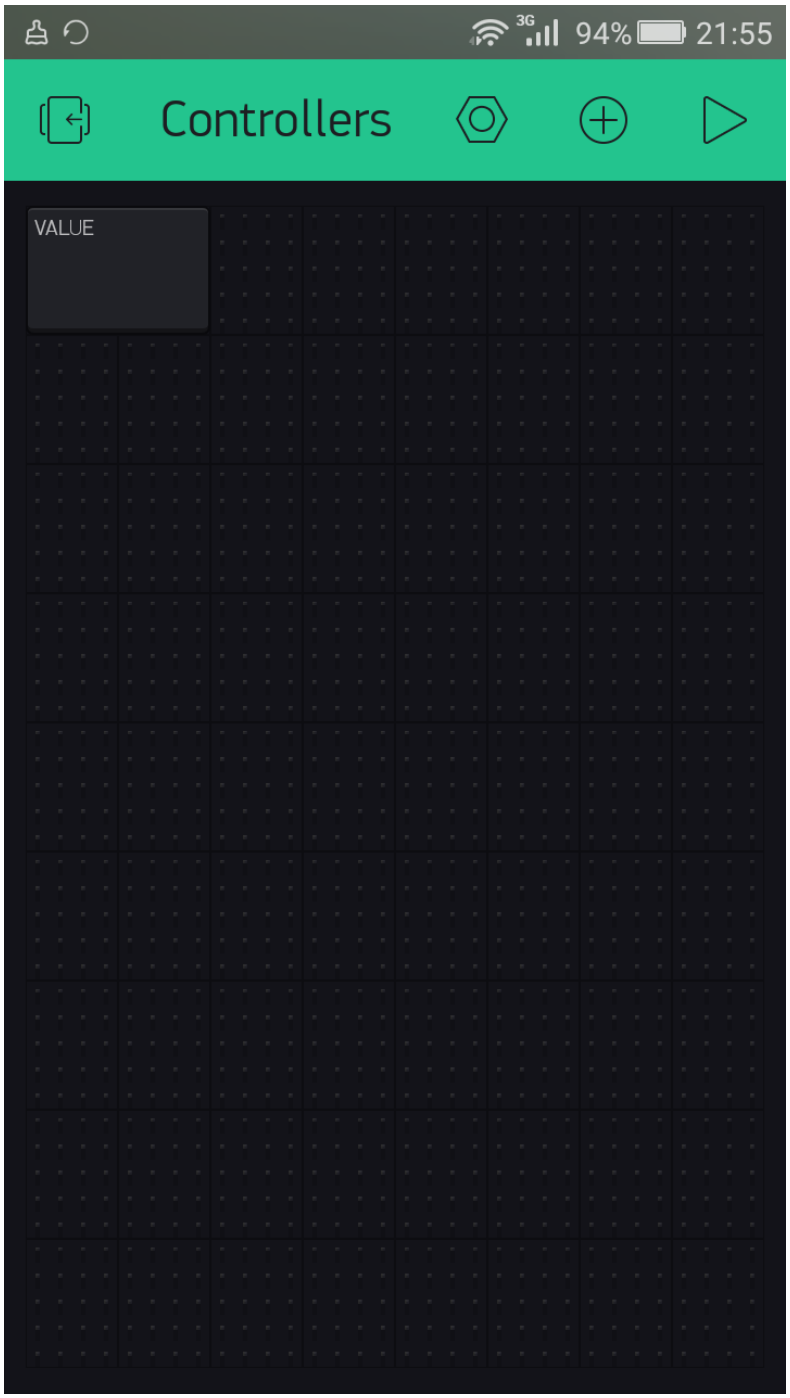

69%
23:11
Joystick Settings
y = param[1].asInt();
[0]
0
255
[1]
0
255
AUTORETURN
OFF
ON
ROTATE ON TILT
OFF
ON
WRITE INTERVAL
100 ms
Delete

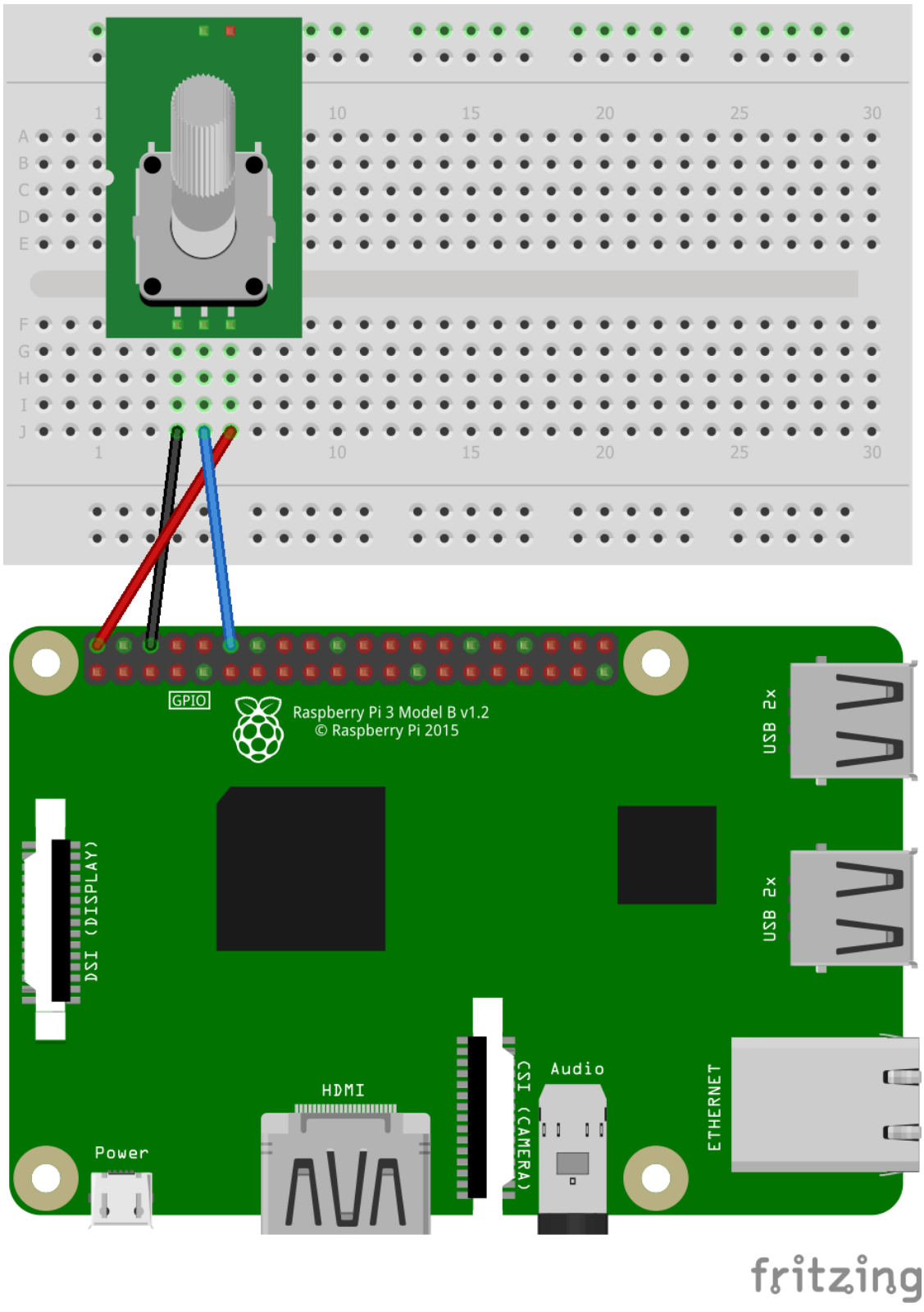

71%
23:15
Controllers
JOYSTICK
V1: 128
V1: 128

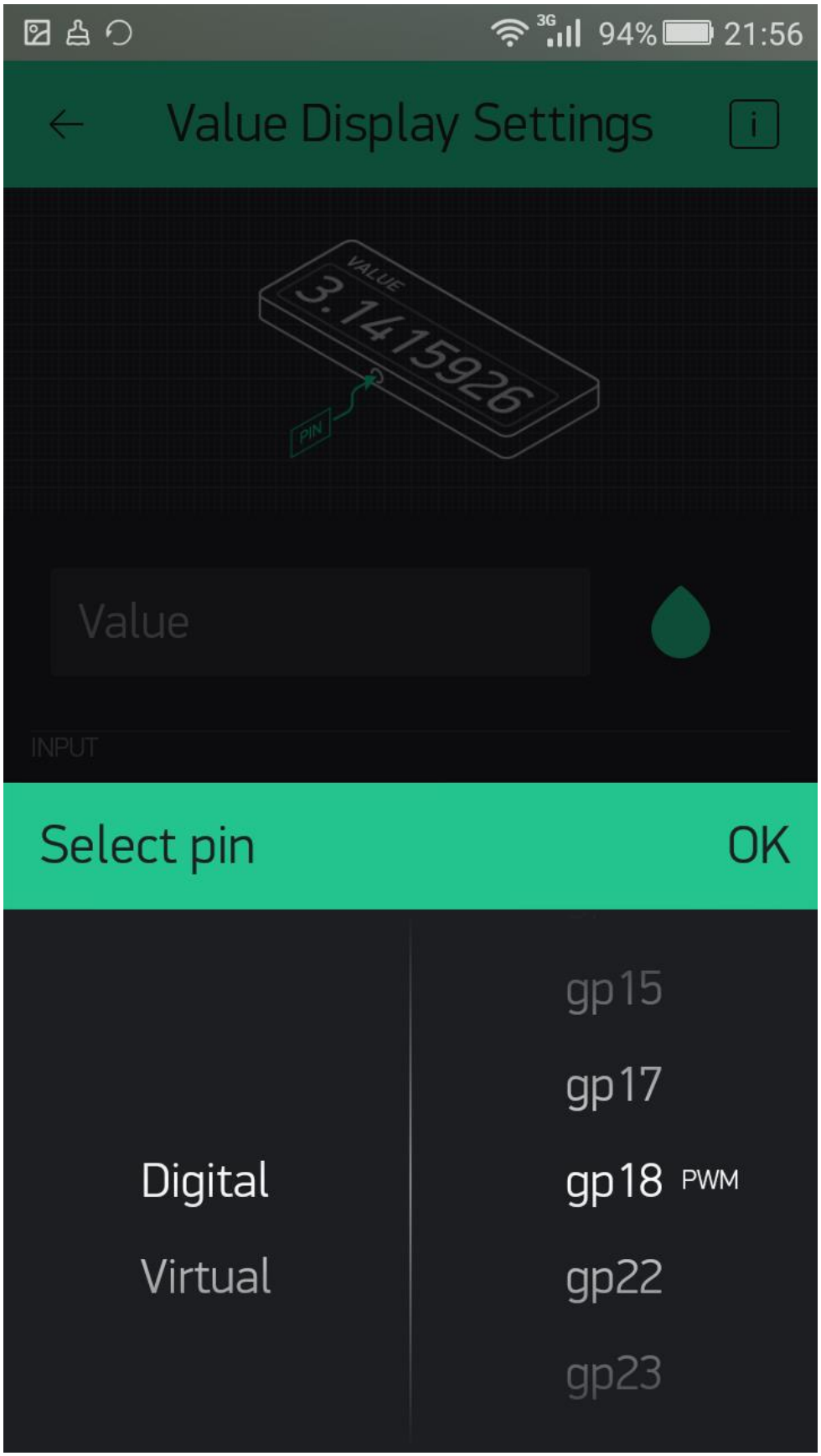

75%
23:23
Controllers
1
JOYSTICK
128
128

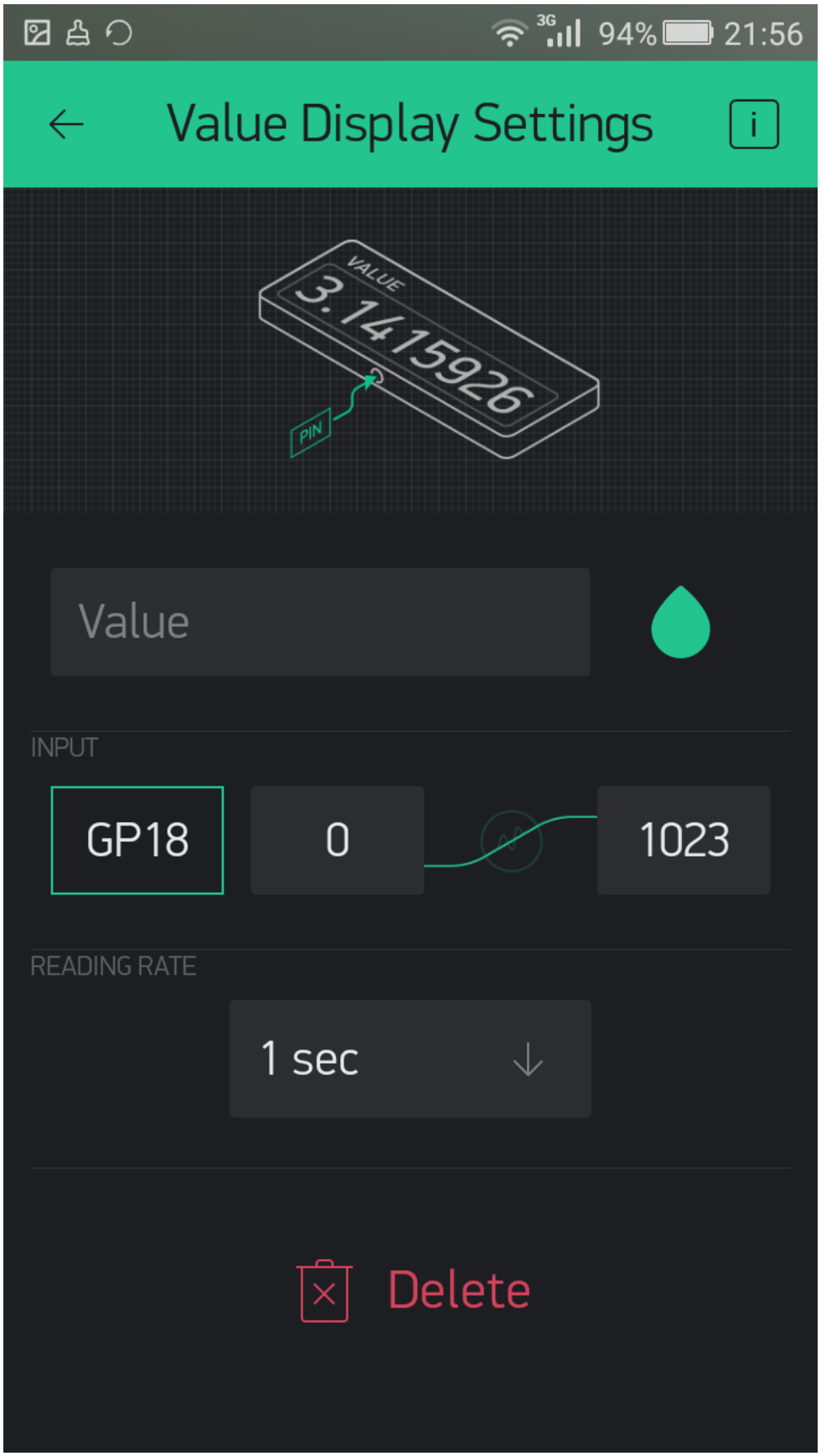

77%
23:27
Controllers
JOYSTICK
V1 128
V1 128
x = 128
y = 255
x = 0
y = 128
x = 255
y = 128
x = 128
y = 0

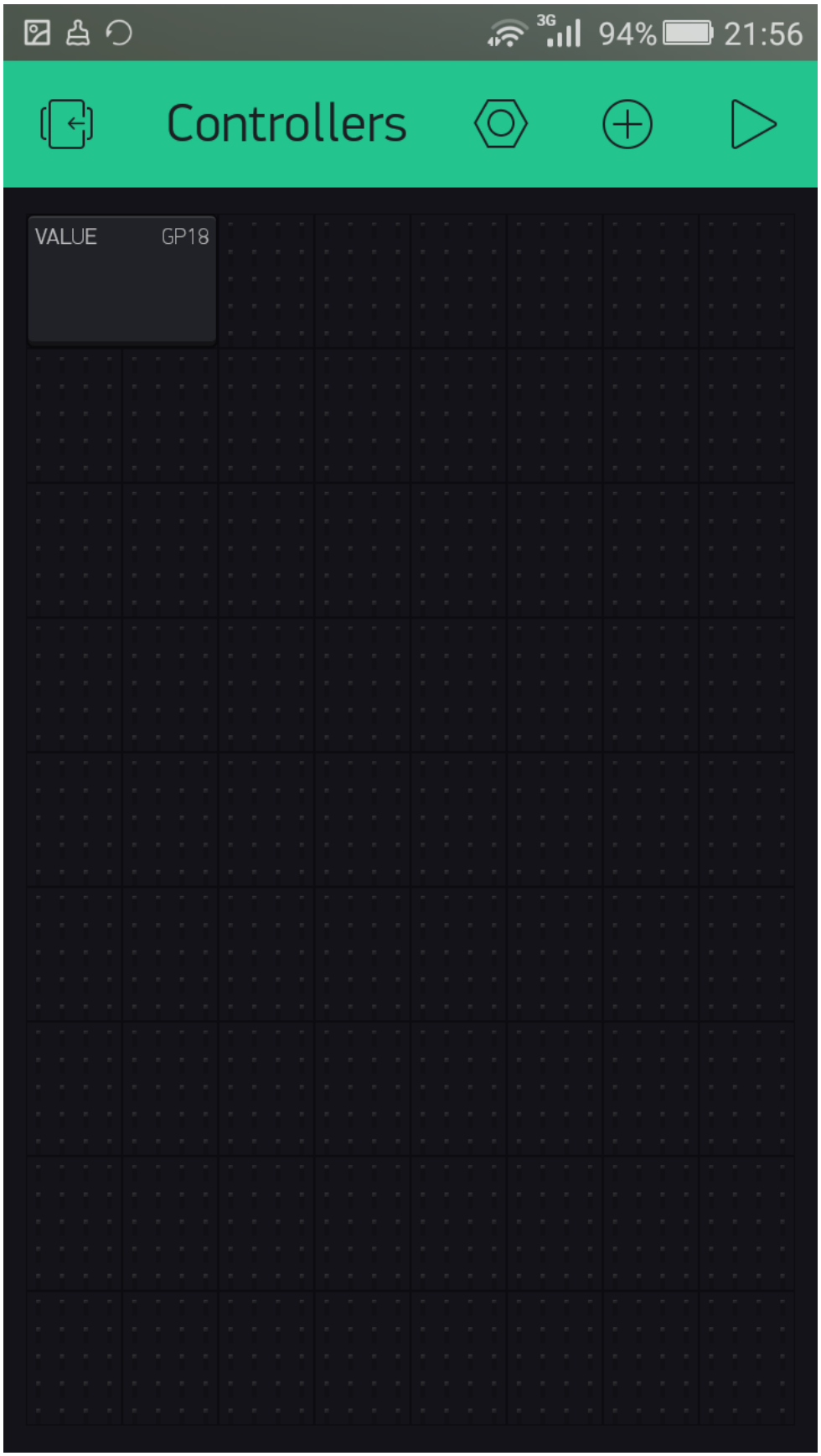
Chapter 4: Using Display Widgets

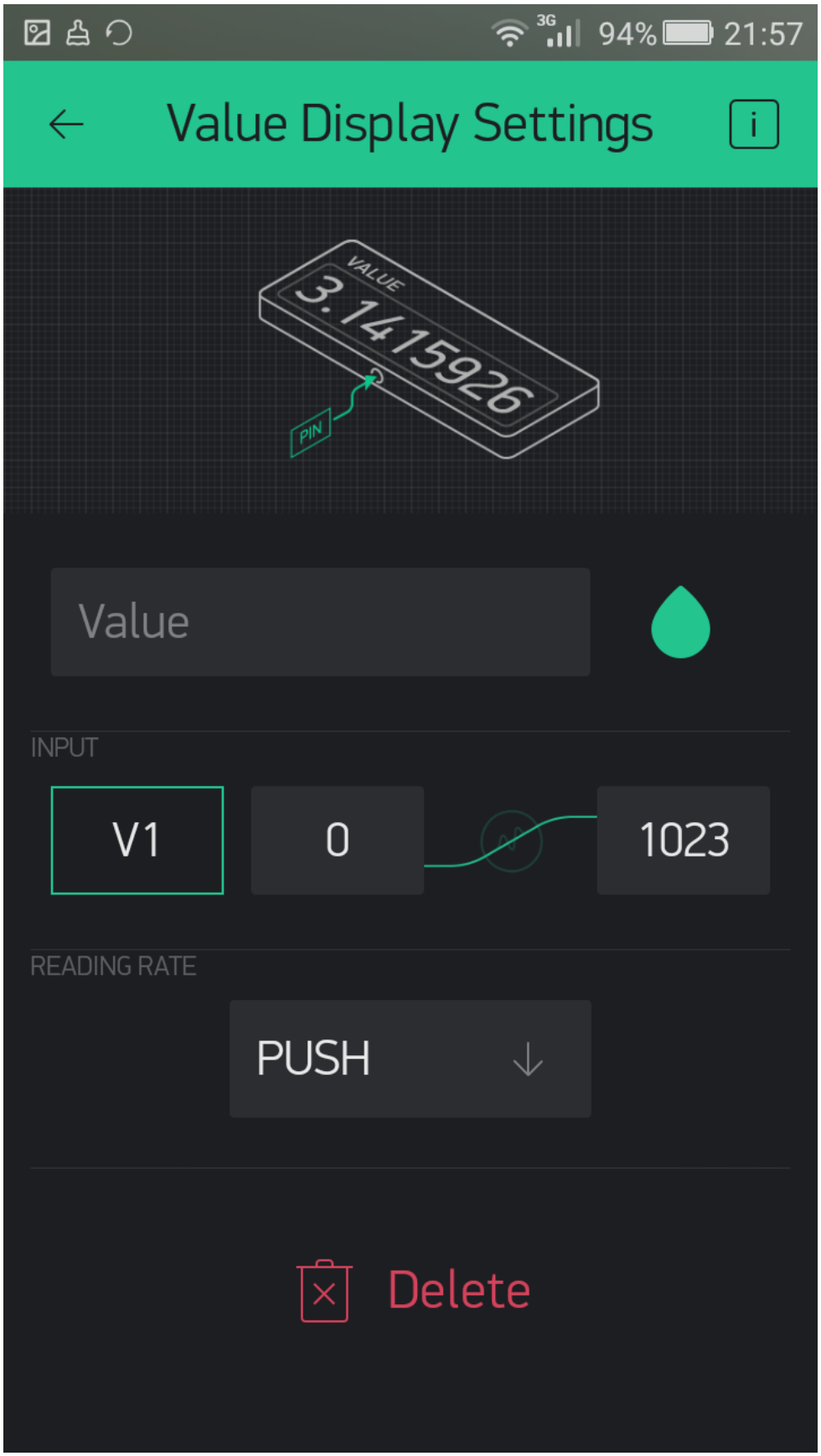


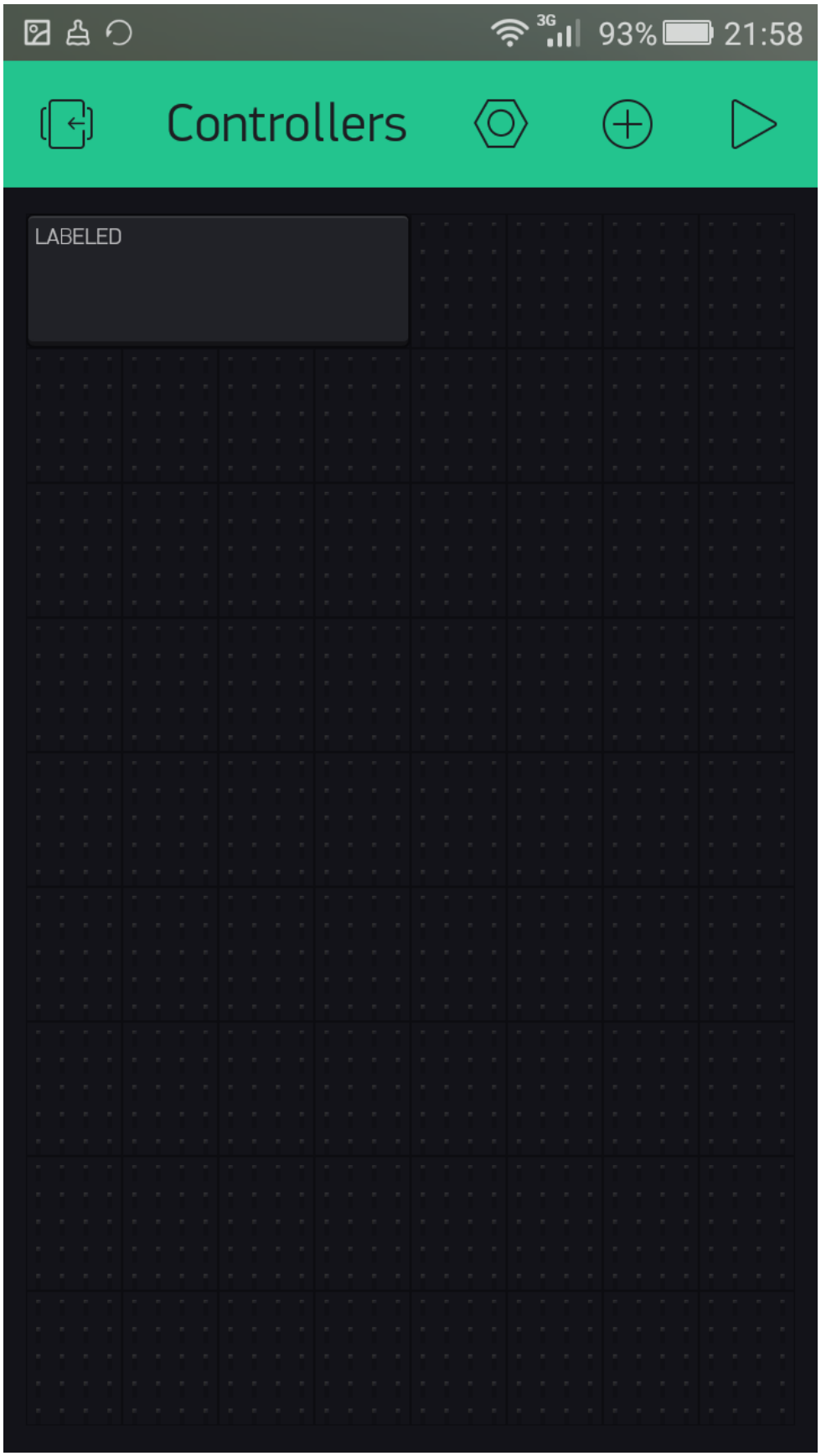

GPIO
Raspberry Pi 3 Model B v1.2
© Raspberry Pi 2015
USB 2x
USB 2x
DSI (DISPLAY)
HDMI
CSI (CAMERA)
Audio
ETHERNET
Power
fritzing

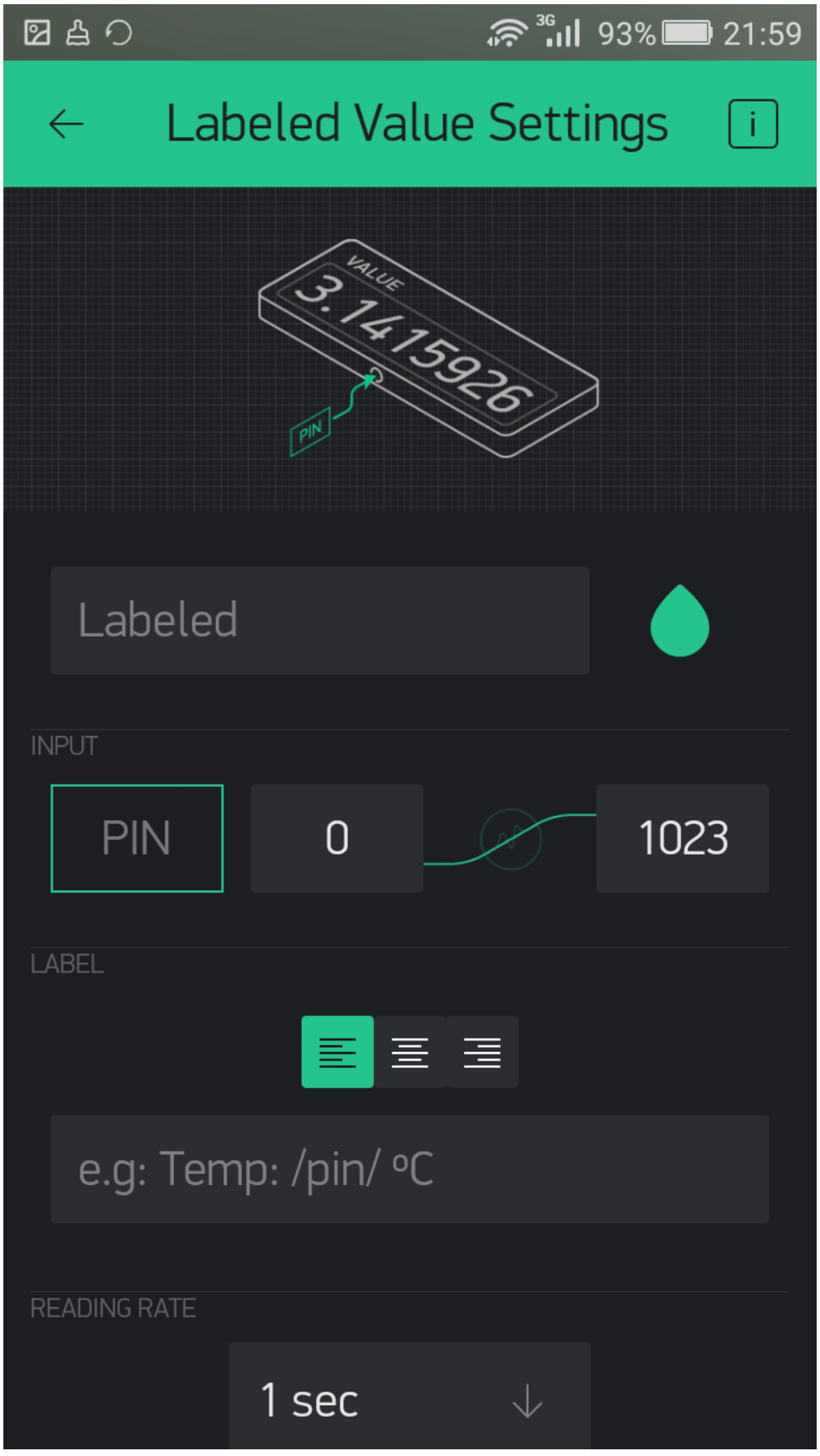

94%
21:56
Value Display Settings
VALUE
3.14159265
PIN
Value
INPUT
Select pin
OK
Digital
Virtual
gp15
gp17
gp18
PWM
gp22
gp23

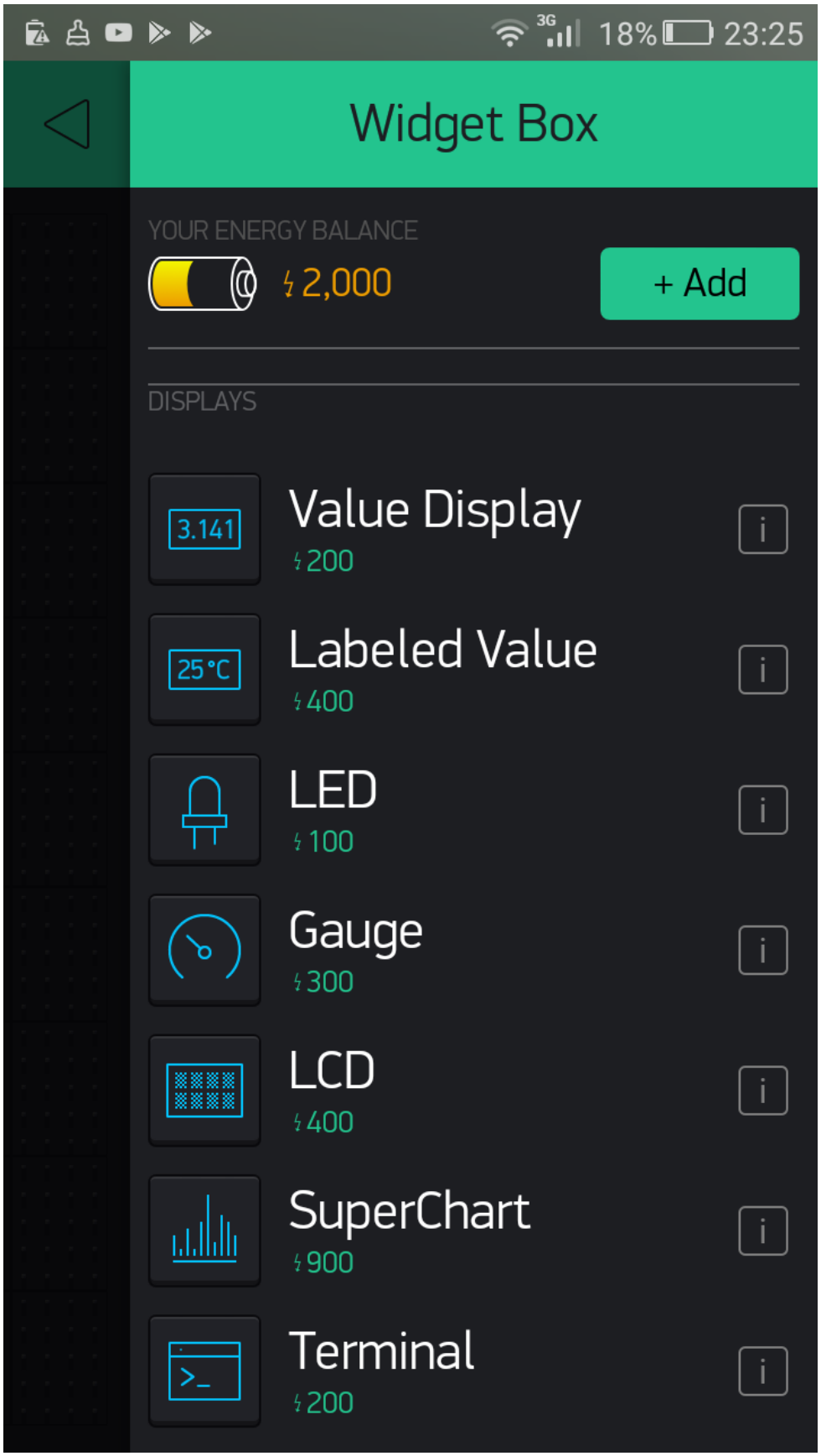

94%
21:56
Value Display Settings
VALUE
3.14159265
PIN
Value
INPUT
GP18
0
1023
READING RATE
1 sec
Delete

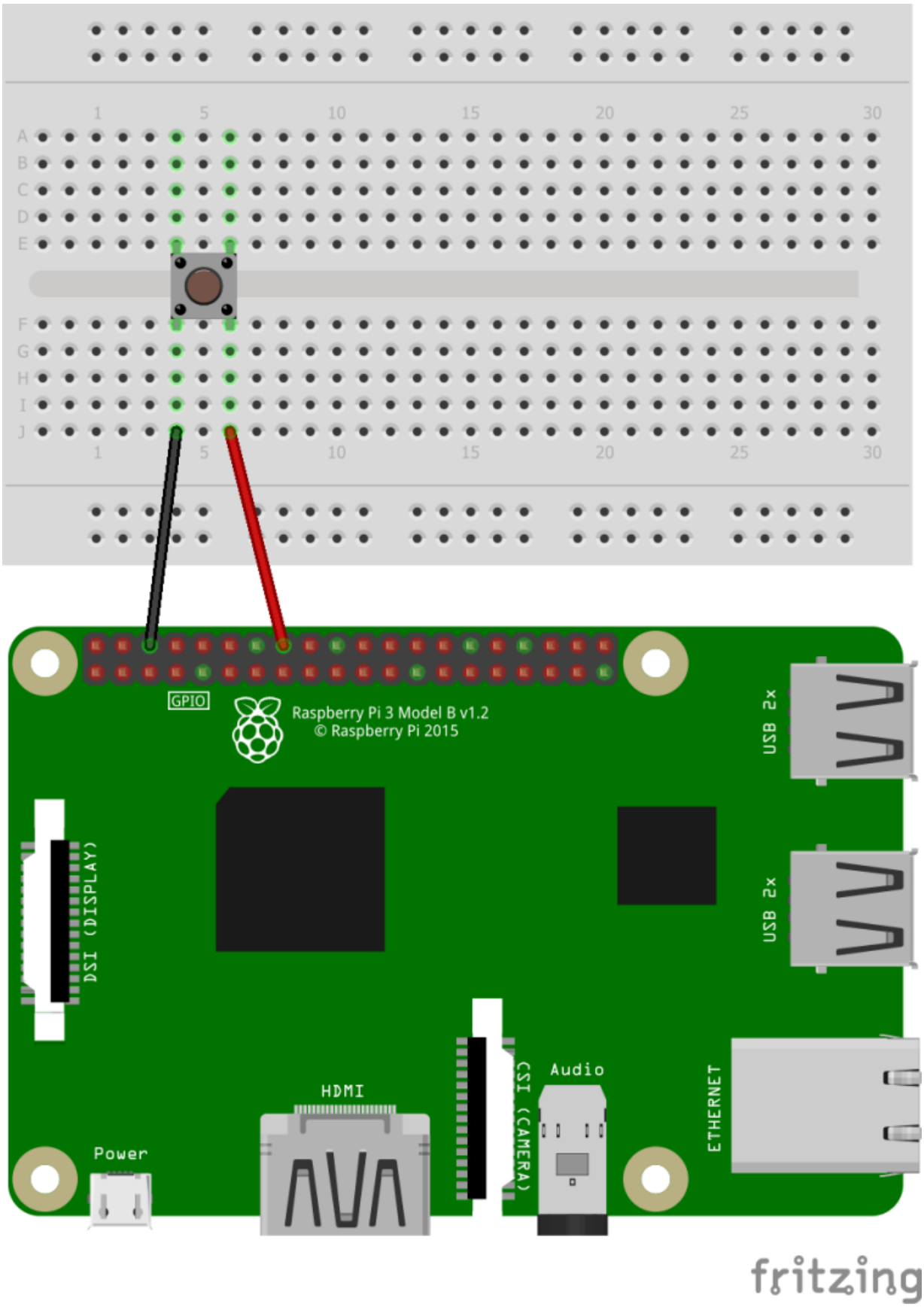

94%
21:56
Controllers
VALUE
GP18

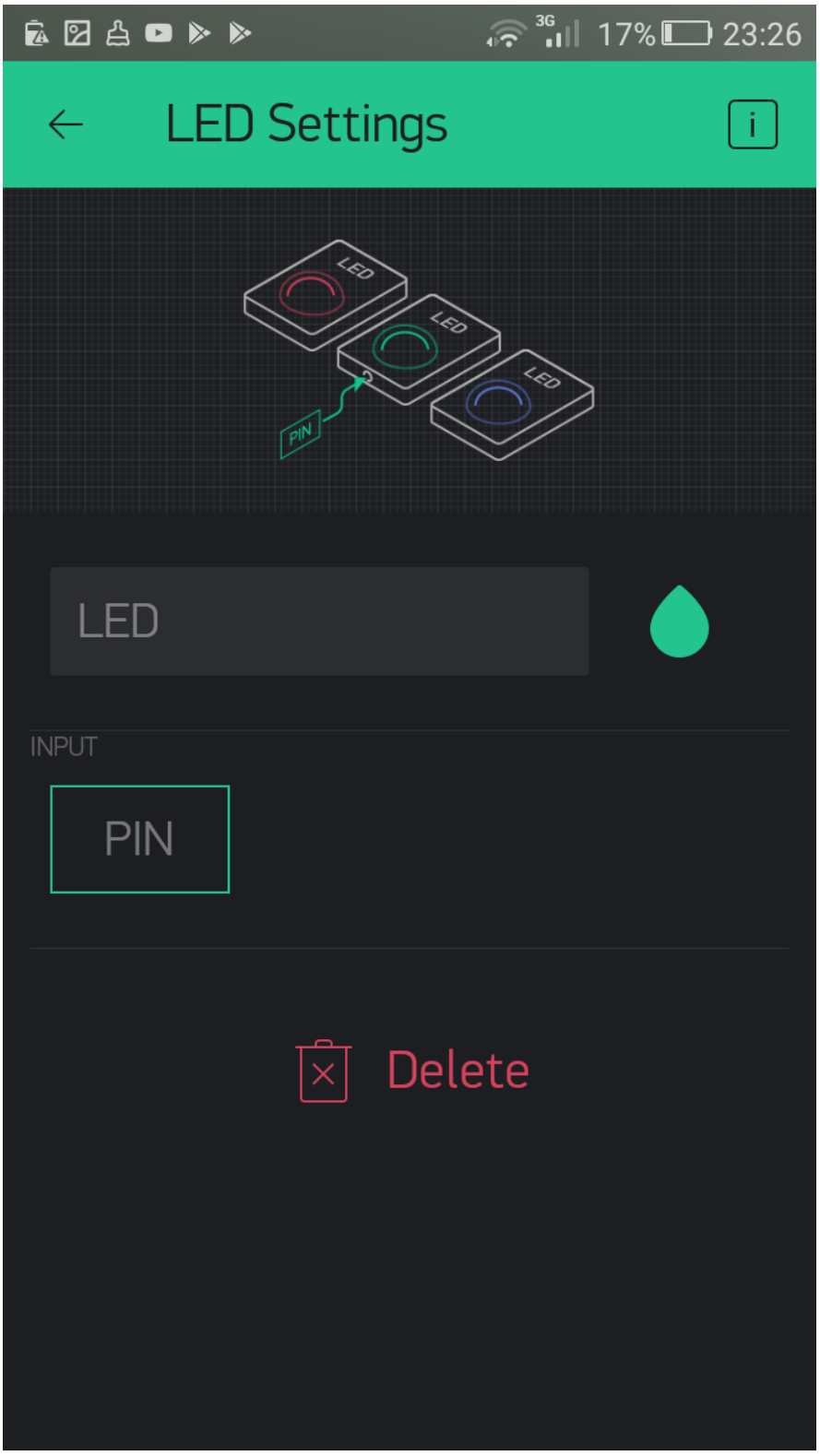

94%
21:57
Value Display Settings
VALUE
3.14159265
PIN
Value
INPUT
V1
0
1023
READING RATE
PUSH
Delete


93%
21:58
Controllers
LABELED

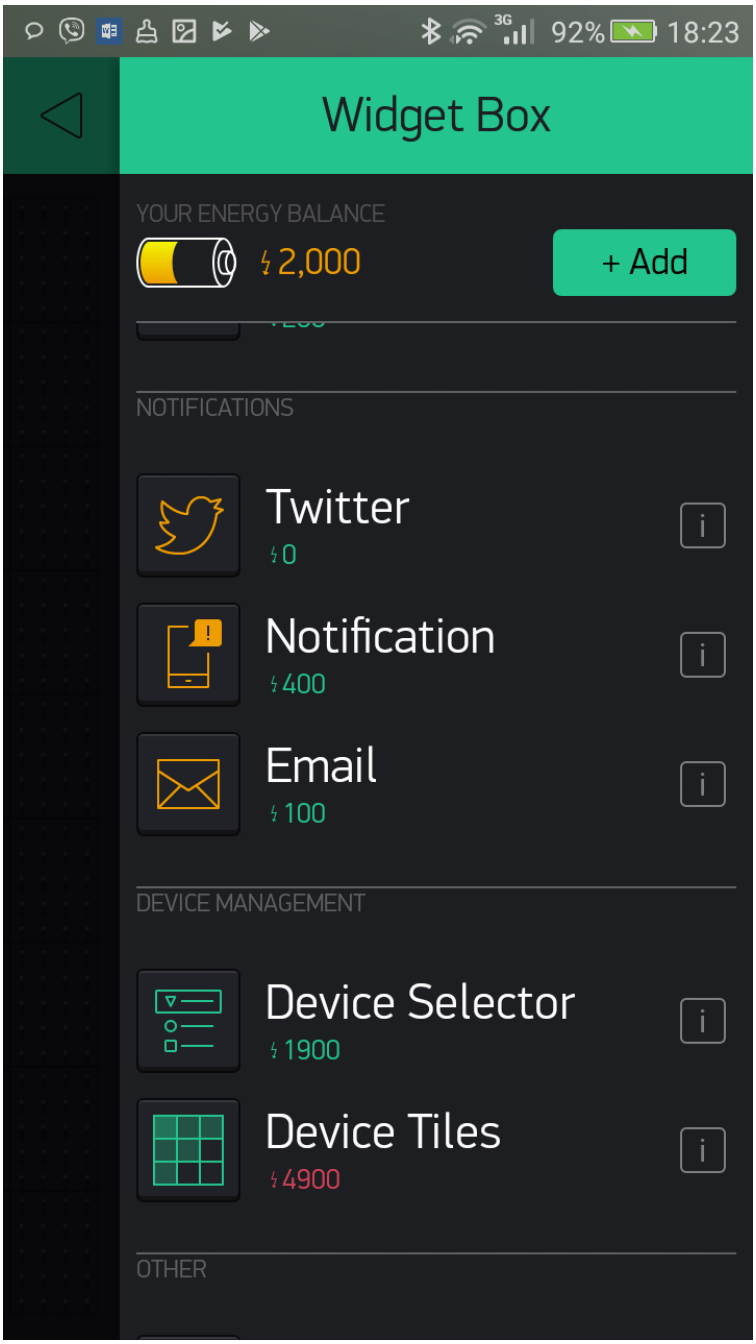

93%
21:59
Labeled Value Settings
VALUE
3.14159265
PIN
Labeled
INPUT
PIN
0
1023
LABEL
e.g: Temp: /pin/ ºC
READING RATE
1 sec

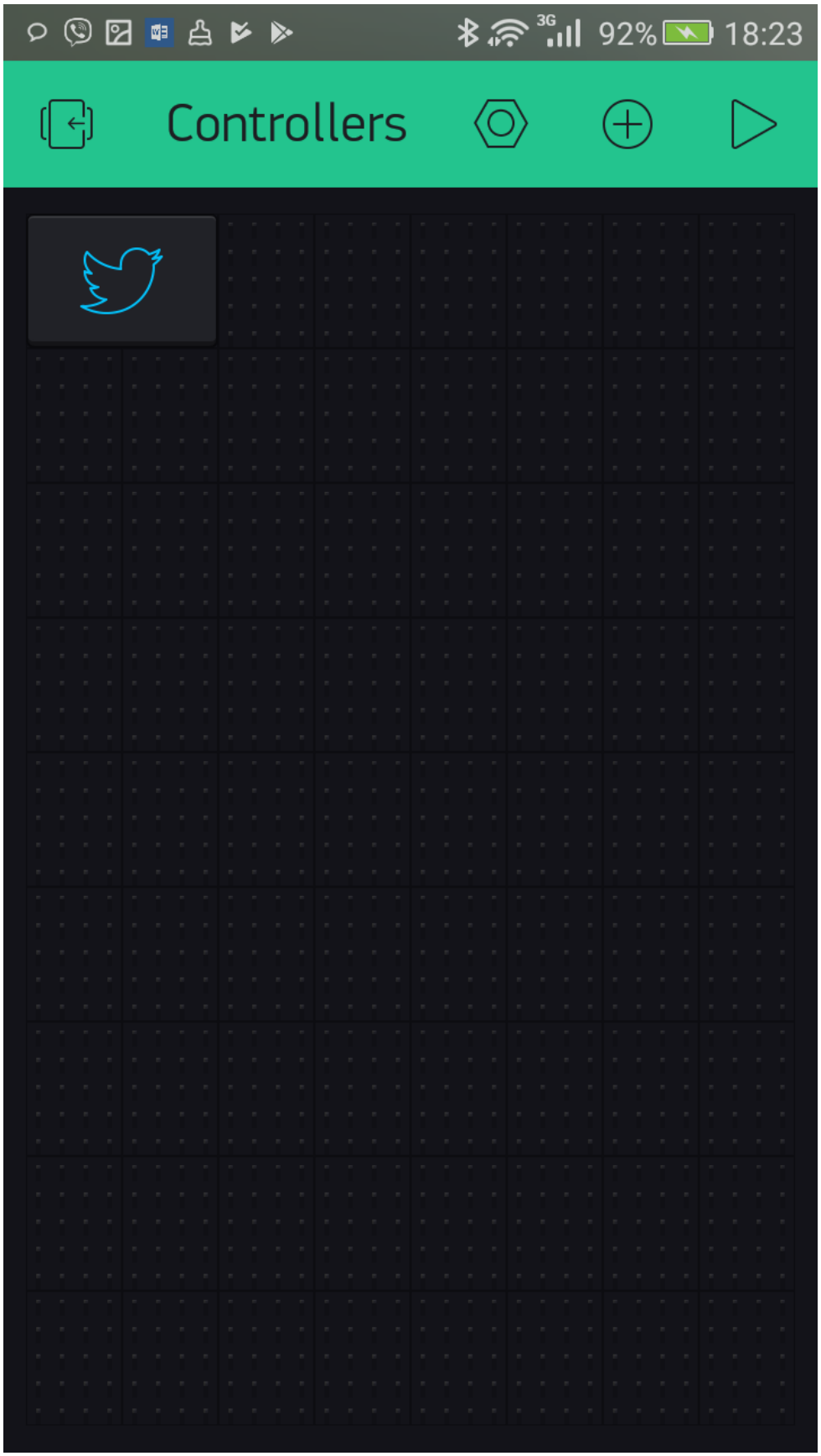

18%
23:25
Widget Box
YOUR ENERGY BALANCE
2,000
+ Add
DISPLAYS
3.141
Value Display
200
25 °C
Labeled Value
400
LED
100
Gauge
300
LCD
400
SuperChart
900
>_
Terminal
200

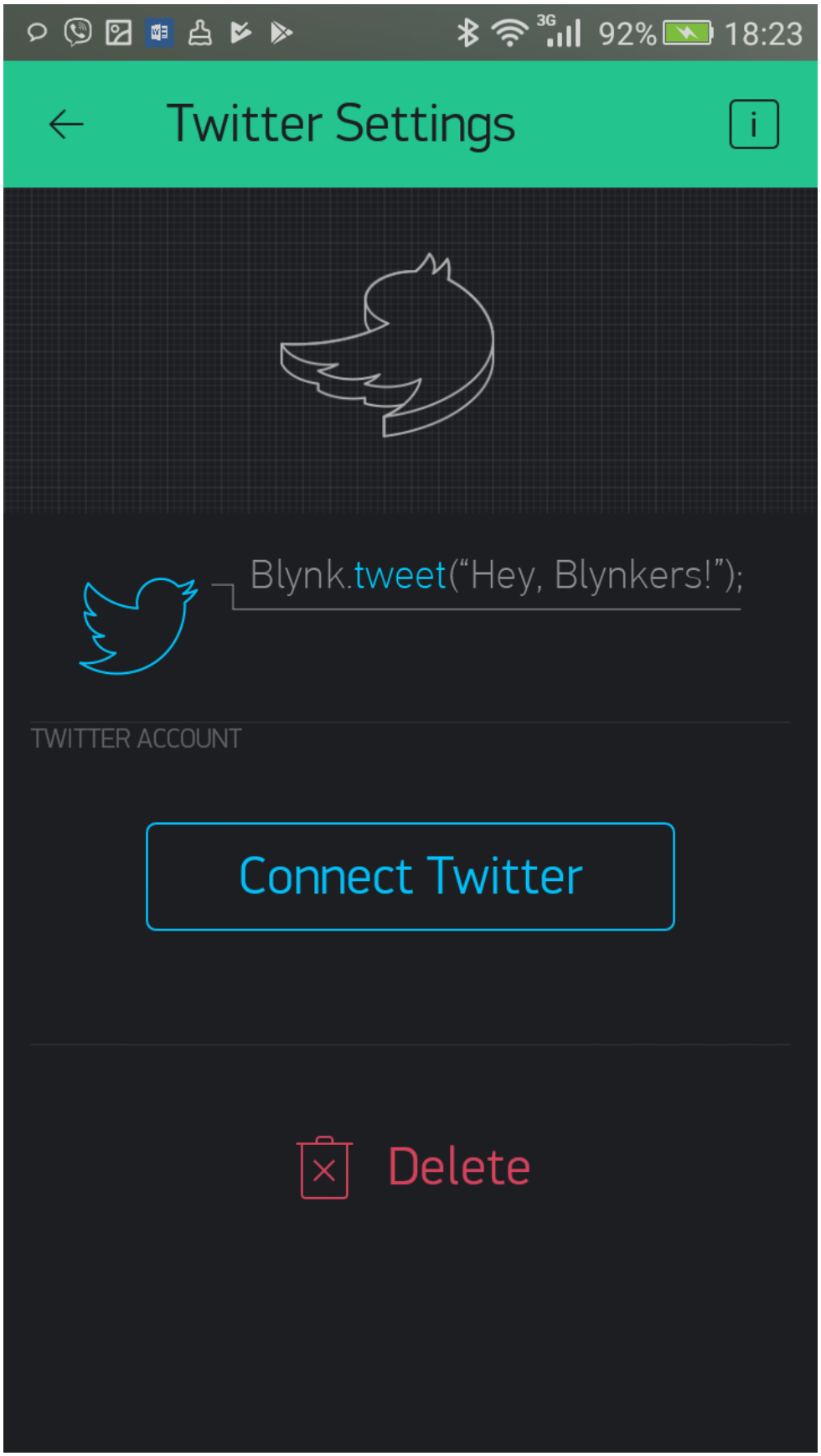

1
5
10
15
20
25
30
A
B
C
D
E
F
G
H
I
J
GPIO
Raspberry Pi 3 Model B v1.2
© Raspberry Pi 2015
USB 2x
USB 2x
DSI (DISPLAY)
CSI (CAMERA)
Audio
HDMI
ETHERNET
Power
fritzing


17%
23:26
LED Settings
i
LED
LED
LED
PIN
LED
INPUT
PIN
Delete

Chapter 5: Using Notification Widgets




92%
18:23
Controllers


92%
18:23
Twitter Settings
i
Blynk.tweet("Hey, Blynkers!");
TWITTER ACCOUNT
Connect Twitter
Delete

Sign up for Twitter ›

Authorise The Blynk to use your account?

The Blynk

By Blynk

www.blynk.cc/

pradeeka7

••••••••••

Remember me · Forgot password?

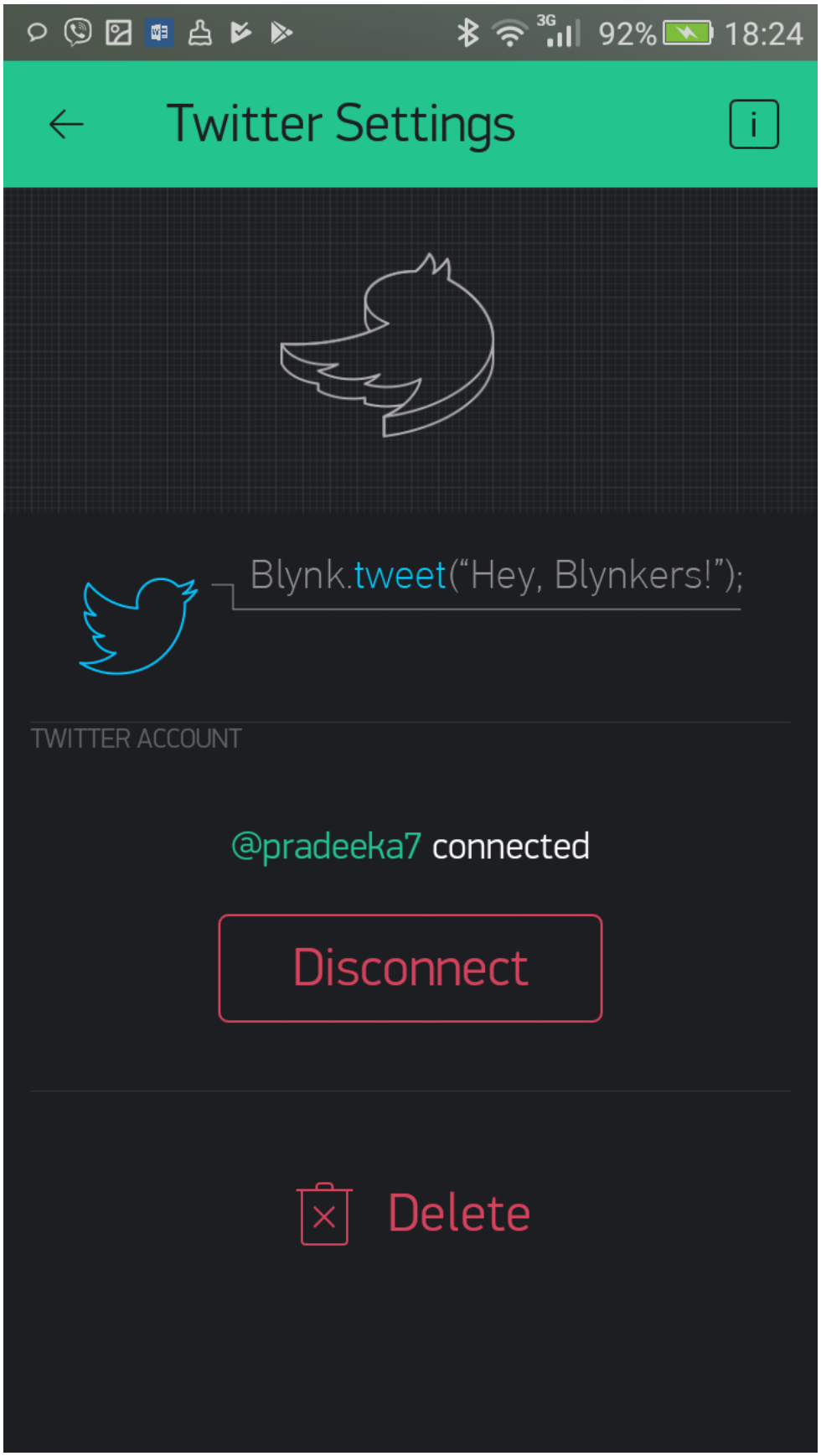
Authorise app **Cancel**

This application will be able to:

- Read Tweets from your timeline.
- See who you follow, and follow new people.
- Update your profile.
- Post Tweets for you.

Will not be able to:

- Access your direct messages.


92%
18:24
Twitter Settings
Blynk.tweet("Hey, Blynkers!");
TWITTER ACCOUNT
@pradeeka7 connected
Disconnect
Delete

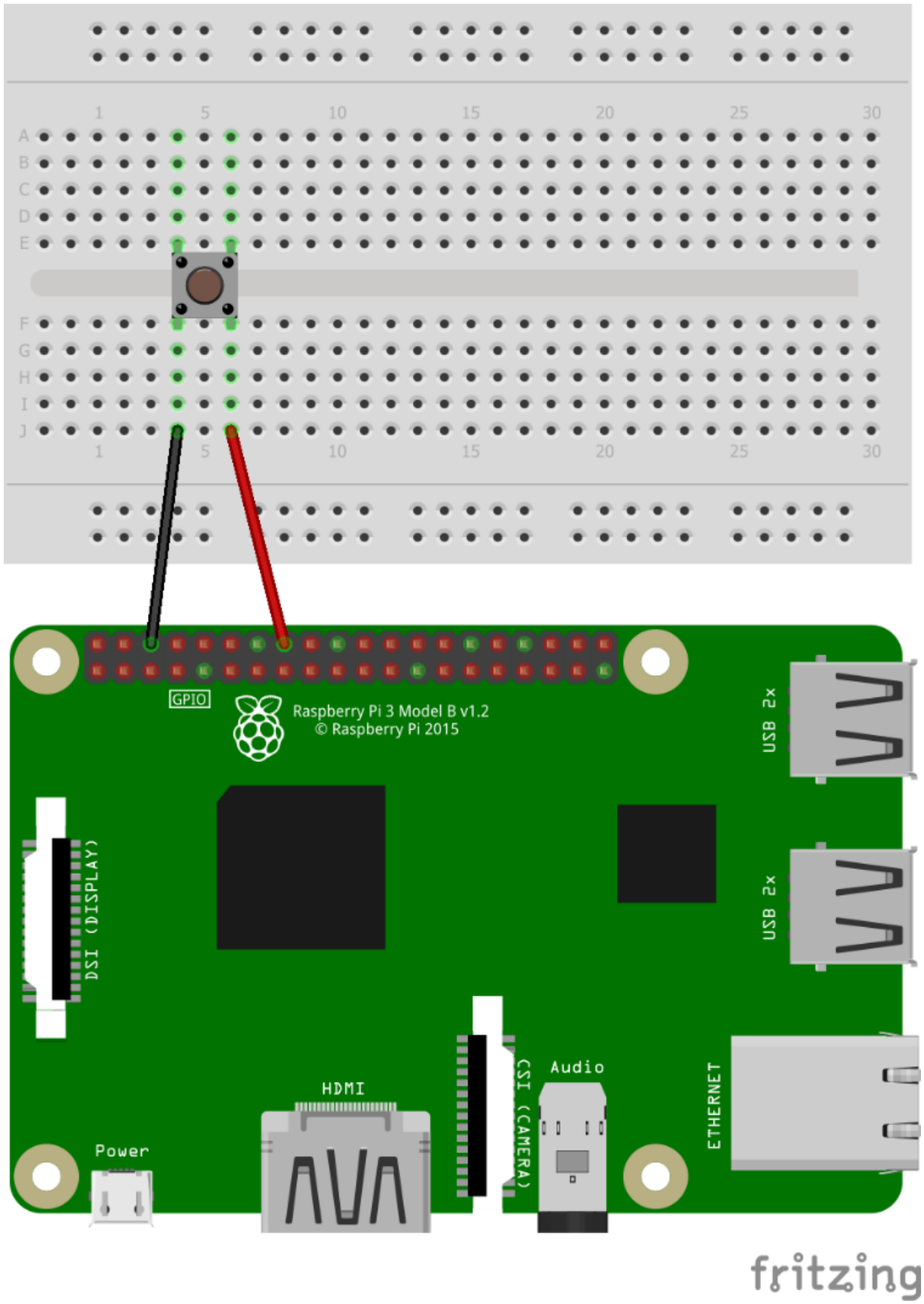
Tweets **Tweets & replies** **Media**

Pradeeka Seneviratne @pradeeka7 · 4h
My Raspberry Pi is tweeting using @blynk_app and it's awesome!
Tweeting time scince startup: 120 seconds.

Pradeeka Seneviratne @pradeeka7 · 4h
My Raspberry Pi is tweeting using @blynk_app and it's awesome!
Tweeting time scince startup: 90 seconds.

Pradeeka Seneviratne @pradeeka7 · 4h
My Raspberry Pi is tweeting using @blynk_app and it's awesome!
Tweeting time scince startup: 60 seconds.

Pradeeka Seneviratne @pradeeka7 · 4h
My Raspberry Pi is tweeting using @blynk_app and it's awesome!
Tweeting time scince startup: 30 seconds.

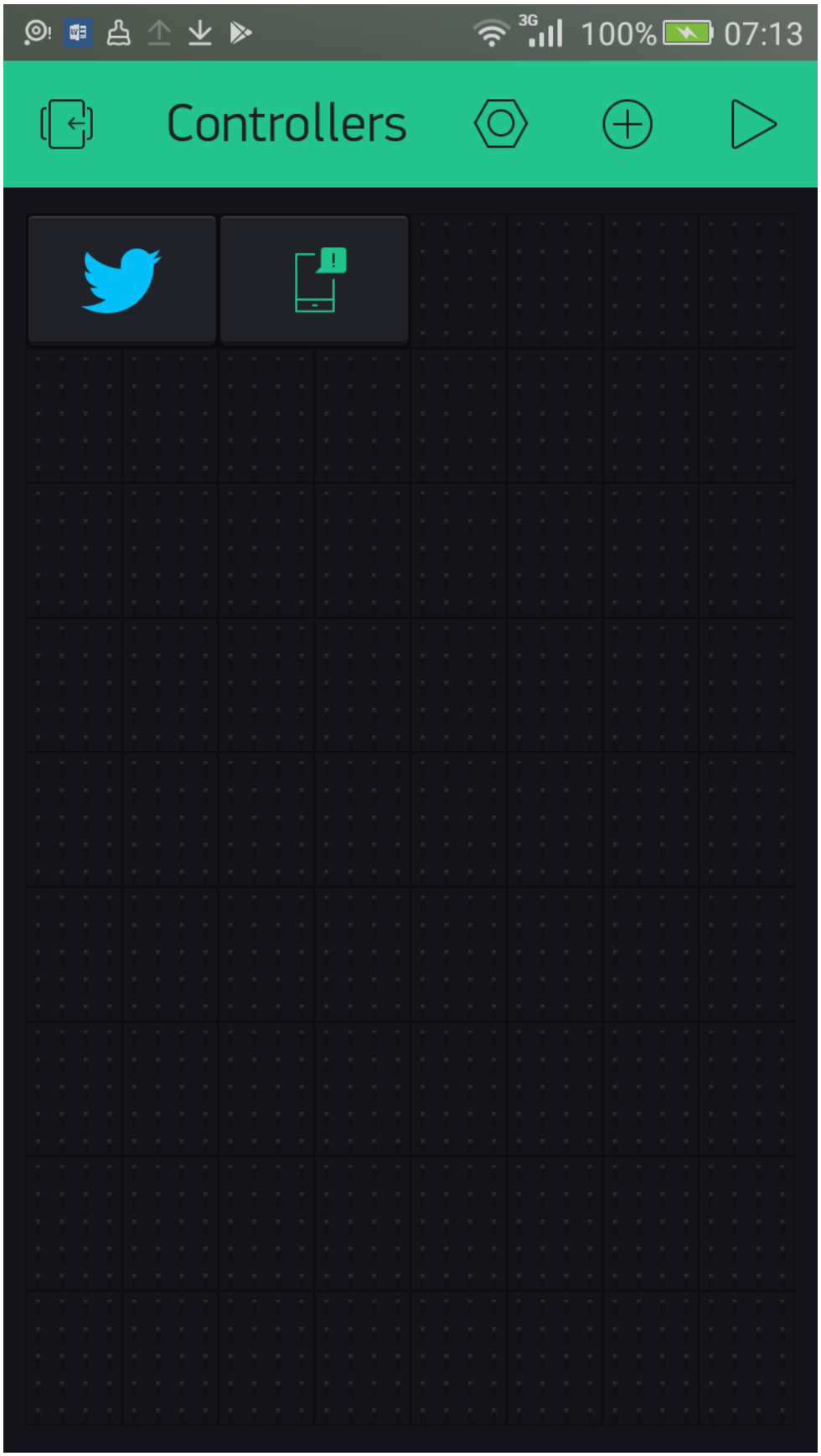

1
5
10
15
20
25
30
A
B
C
D
E
F
G
H
I
J
GPIO
Raspberry Pi 3 Model B v1.2
© Raspberry Pi 2015
USB 2x
USB 2x
DSI (DISPLAY)
HDMI
CSI (CAMERA)
Audio
ETHERNET
Power
fritzing

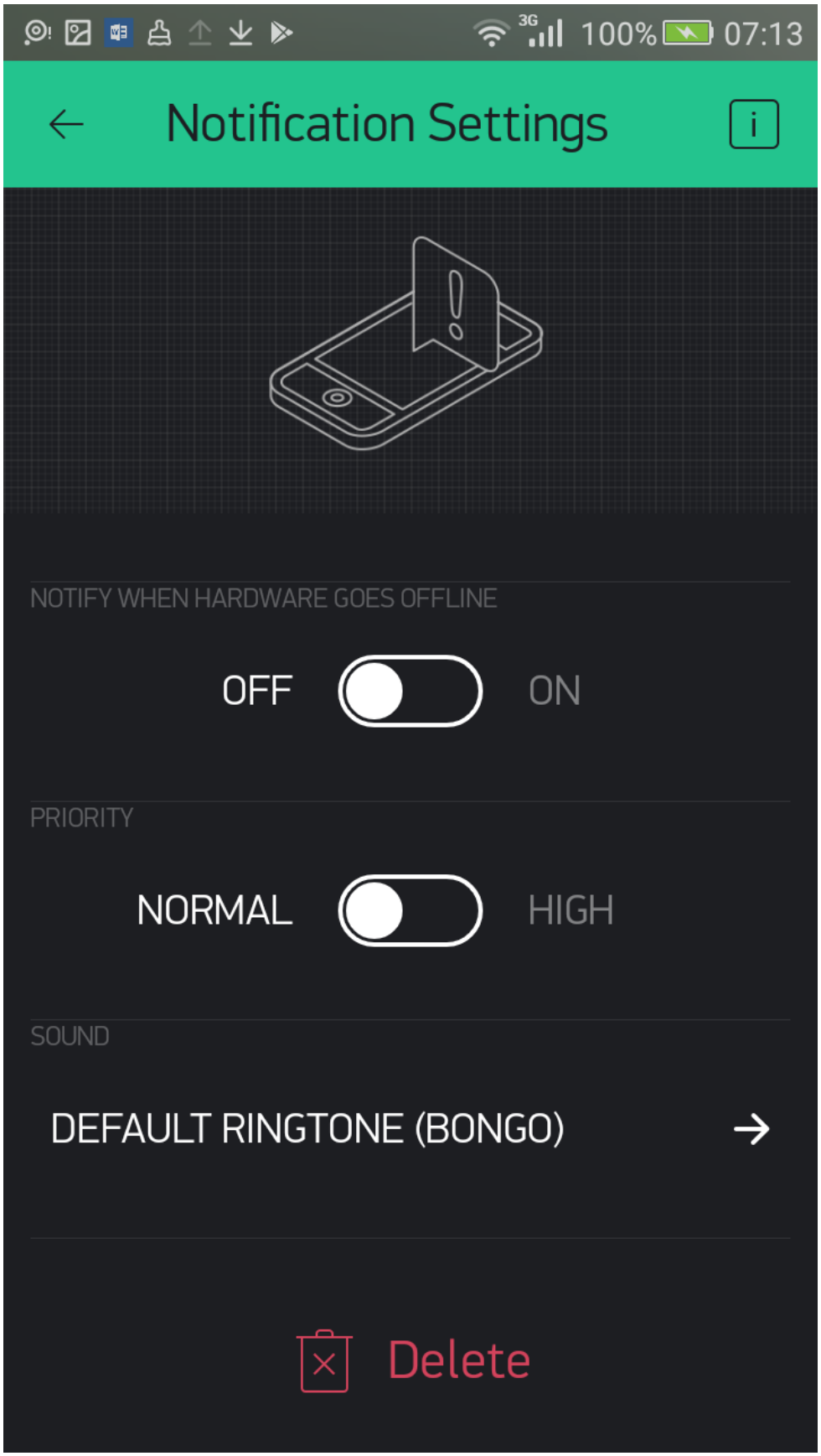
Tweets Tweets & replies Media

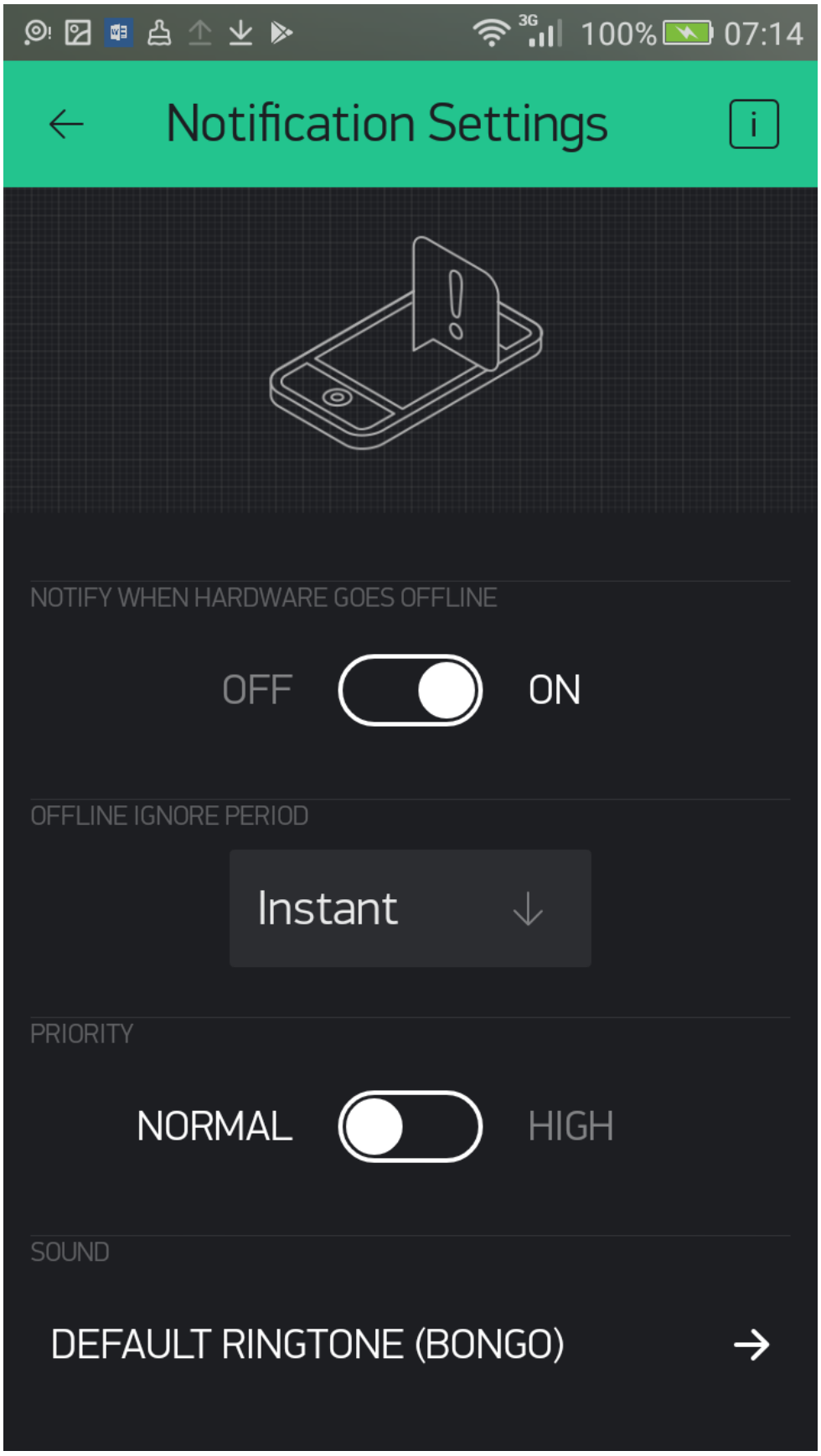
Pradeeka Seneviratne @pradeeka7 · 15s
Twitter button is pressed!
Tweeting time since startup: 30 seconds.

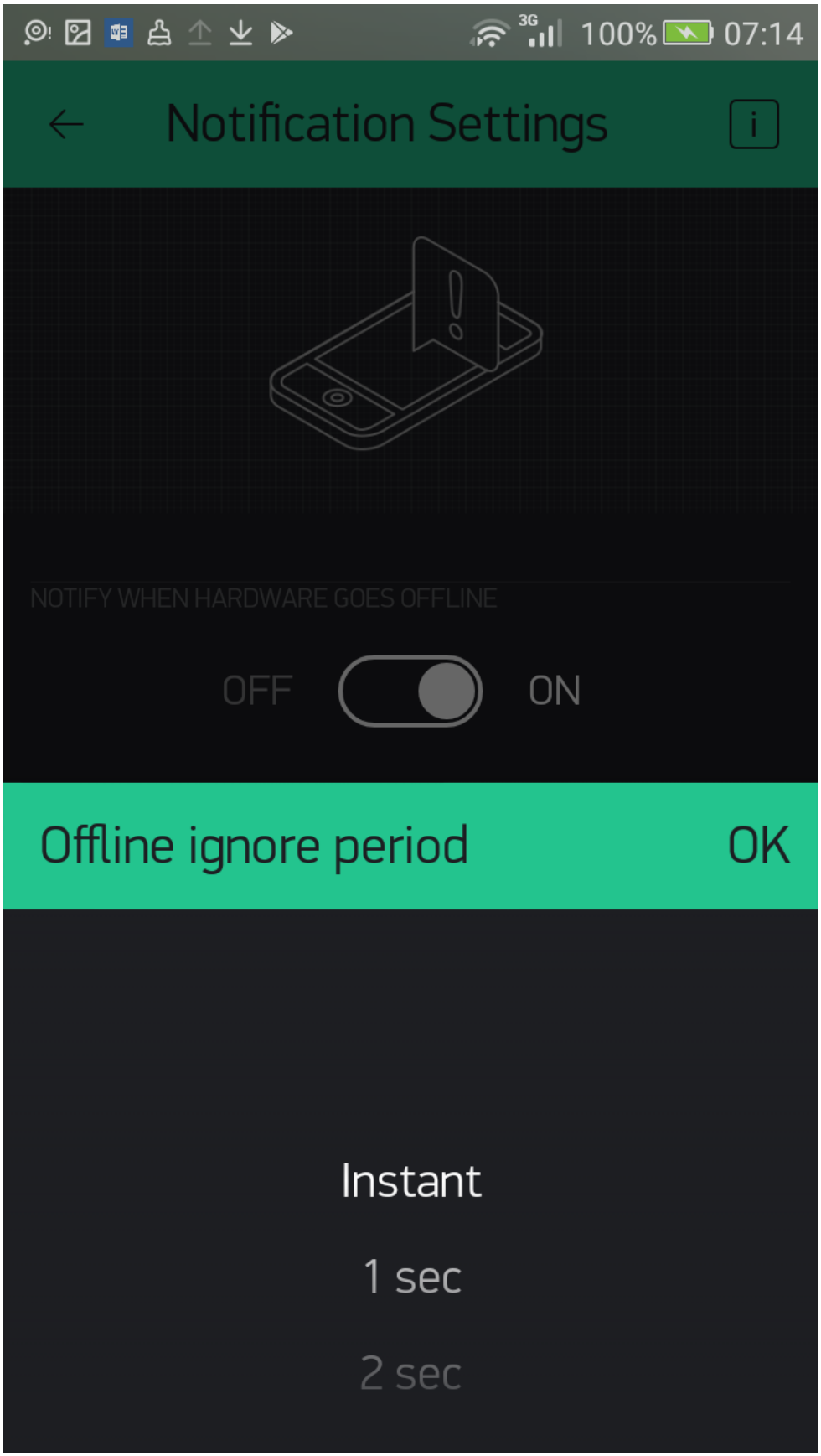
Pradeeka Seneviratne @pradeeka7 · 33s
Twitter button is pressed!
Tweeting time since startup: 12 seconds.

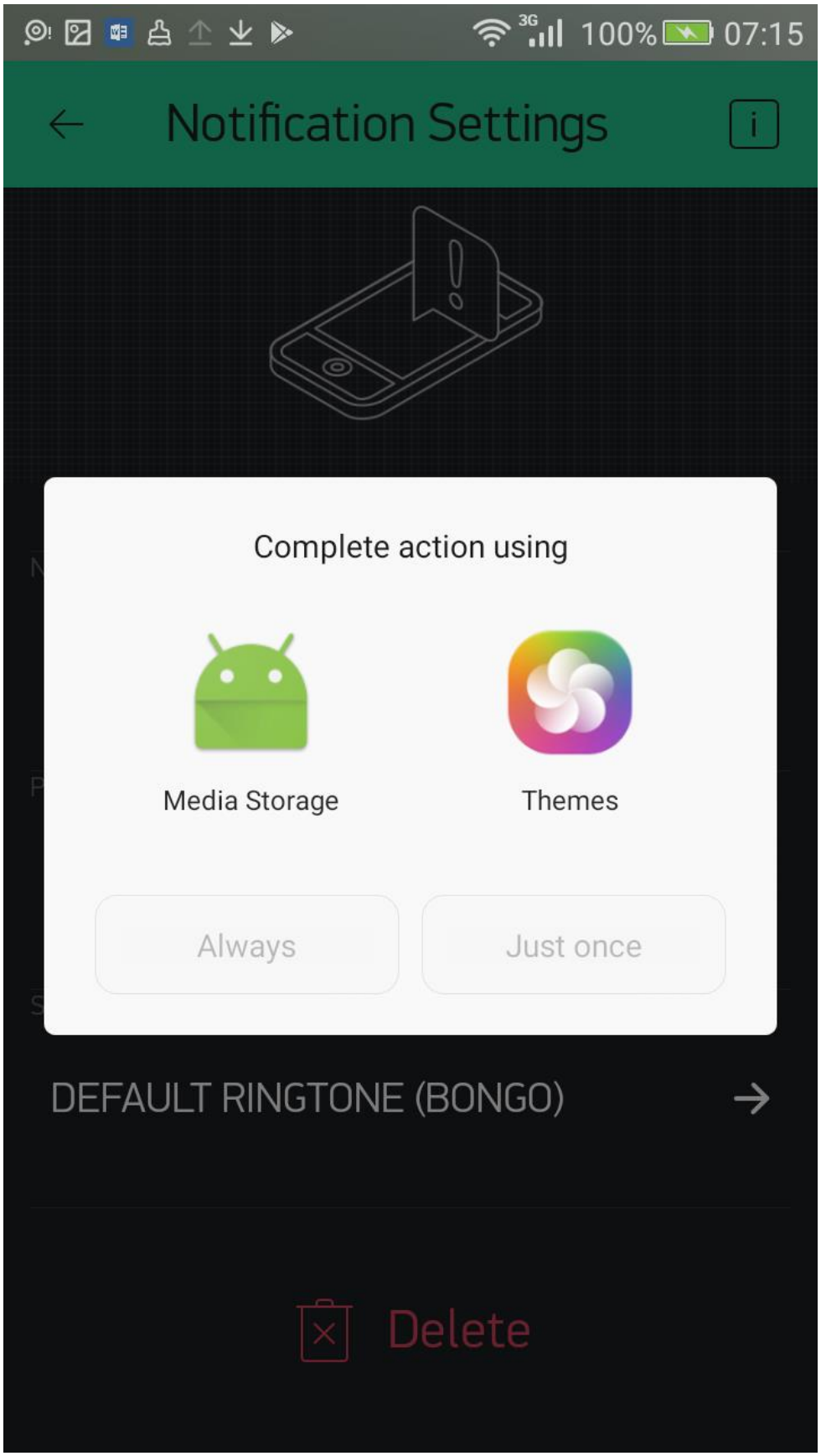
Pradeeka Seneviratne @pradeeka7 · 3h
Twitter button is pressed!
Tweeting time since startup: 9 seconds.

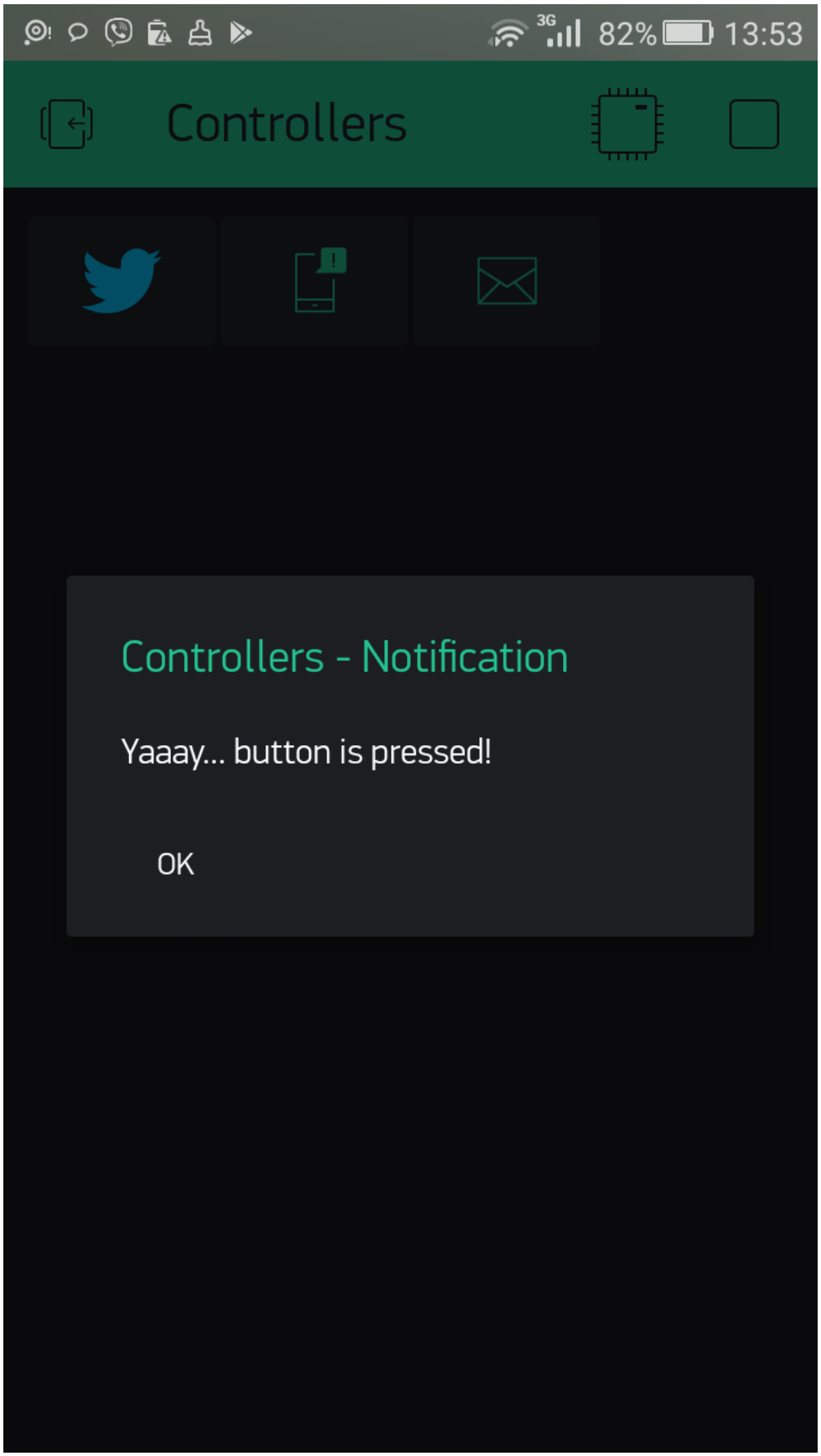

100%
07:13
Controllers

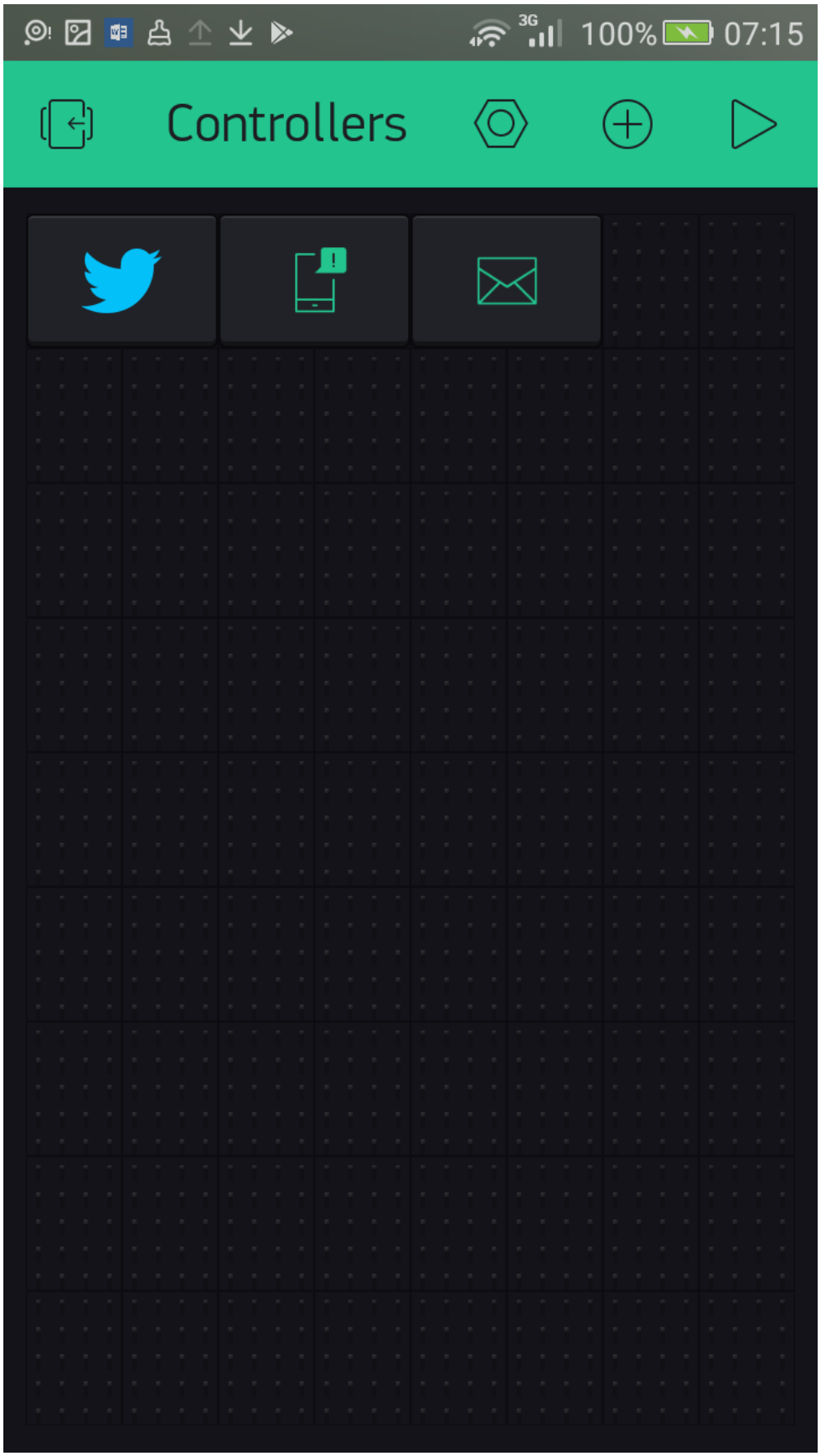

100%
07:13
Notification Settings
NOTIFY WHEN HARDWARE GOES OFFLINE
OFF
ON
PRIORITY
NORMAL
HIGH
SOUND
DEFAULT RINGTONE (BONGO)
Delete

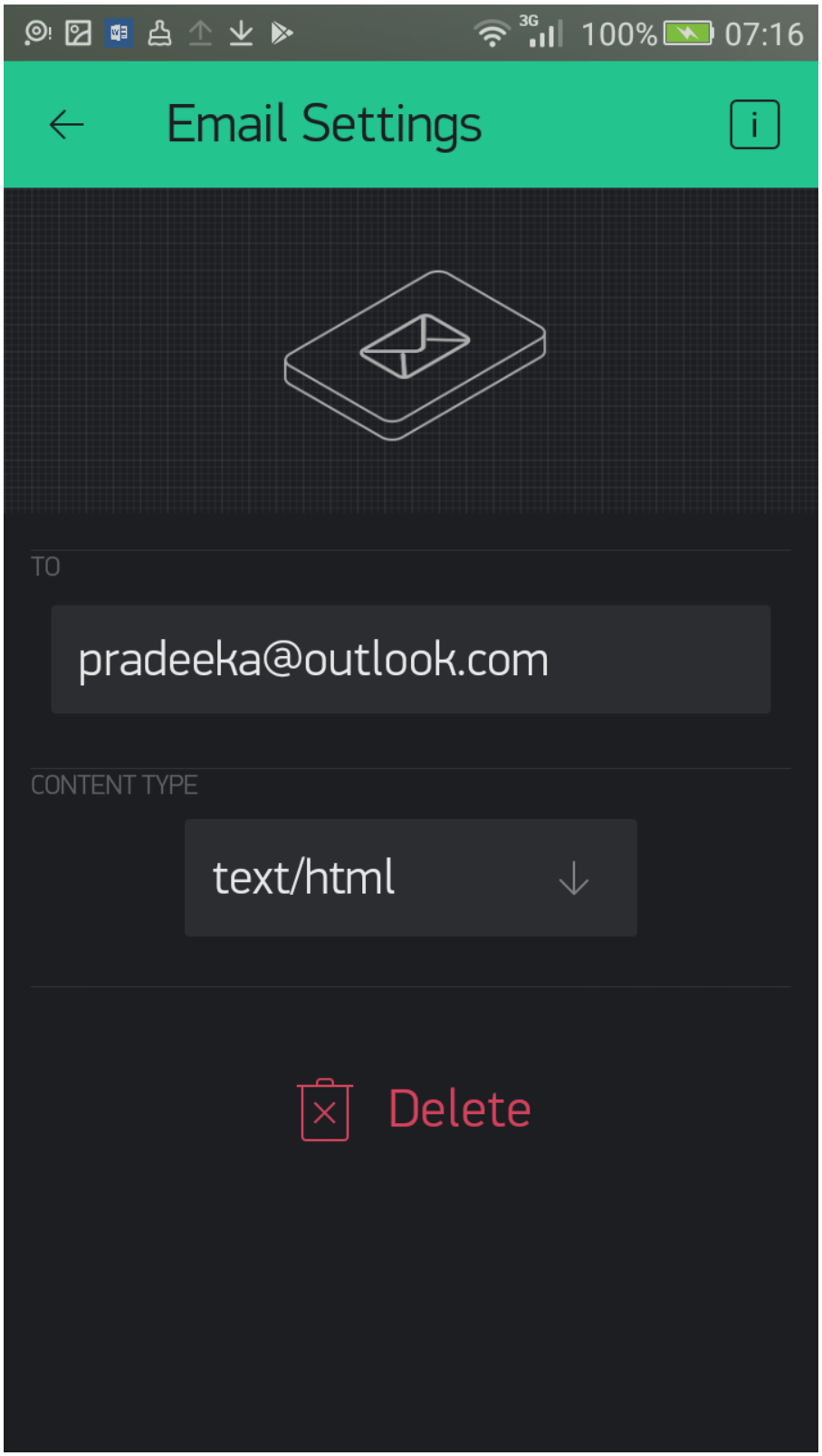

100%
07:14
Notification Settings
NOTIFY WHEN HARDWARE GOES OFFLINE
OFF
ON
OFFLINE IGNORE PERIOD
Instant
PRIORITY
NORMAL
HIGH
SOUND
DEFAULT RINGTONE (BONGO)


100%
07:14
Notification Settings
NOTIFY WHEN HARDWARE GOES OFFLINE
OFF
ON
Offline ignore period
OK
Instant
1 sec
2 sec

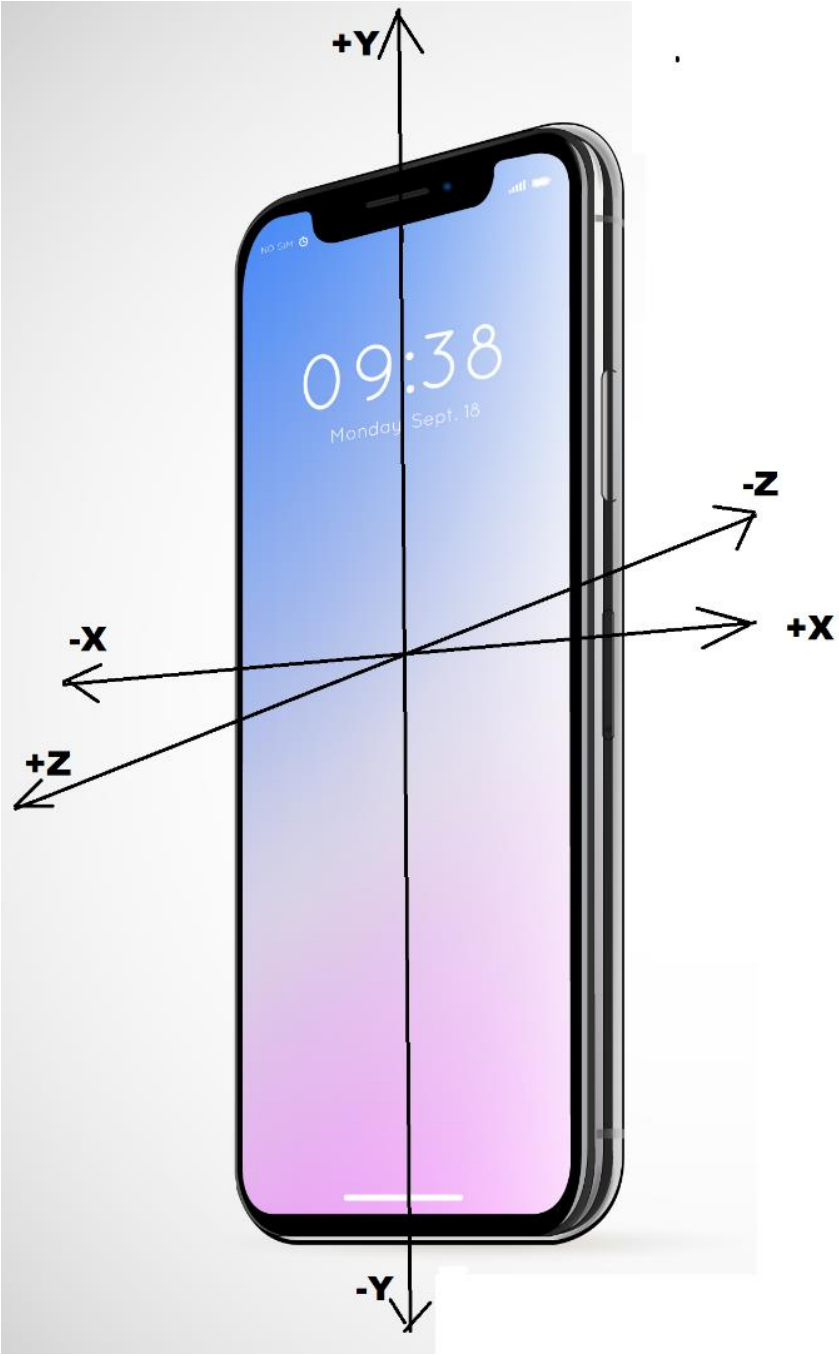

100%
07:15
Notification Settings
Complete action using
Media Storage
Themes
Always
Just once
DEFAULT RINGTONE (BONGO)
Delete

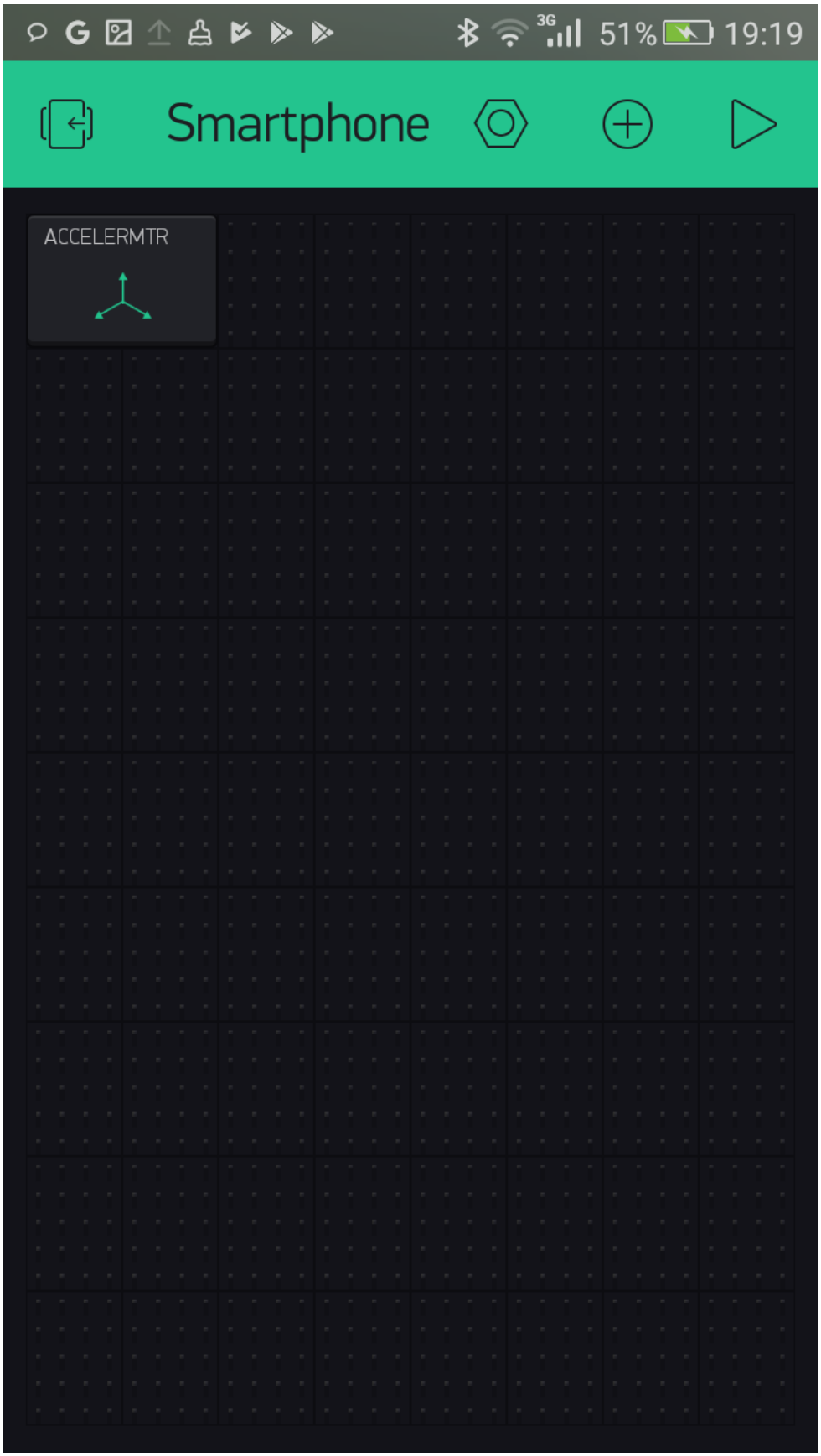

82%
13:53
Controllers
Controllers - Notification
Yaaay... button is pressed!
OK

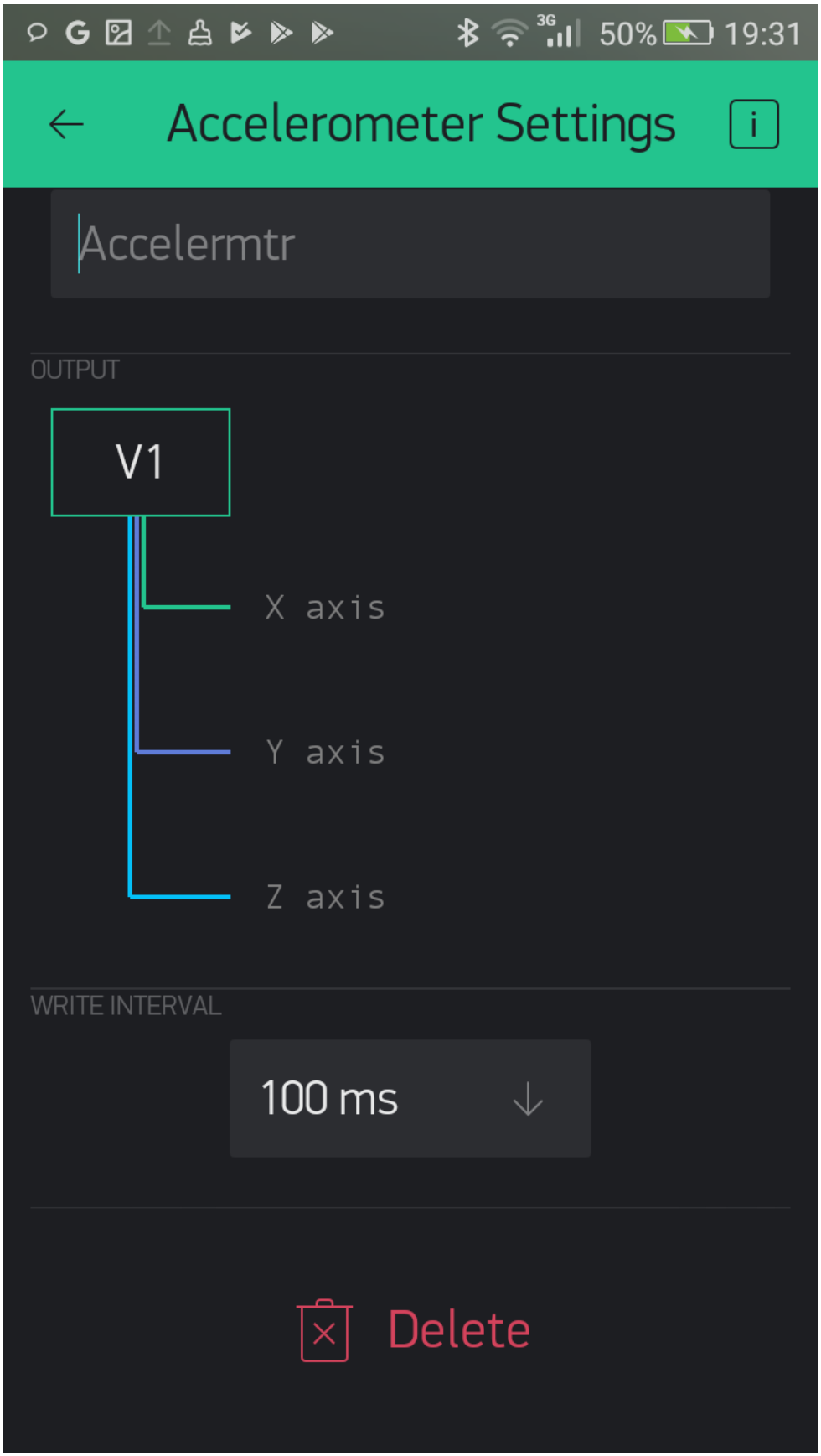

100%
07:15
Controllers

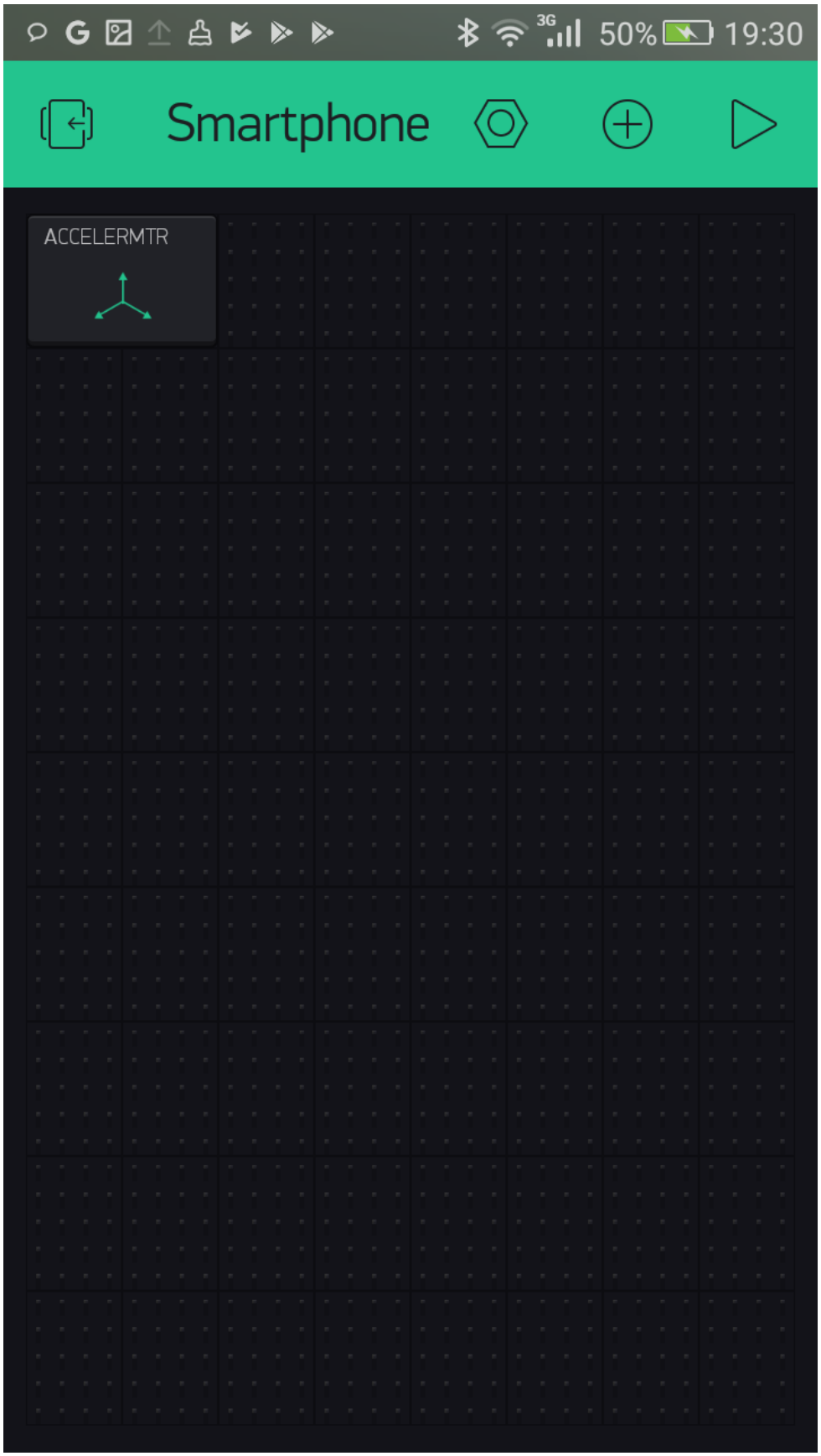

100%
07:16
Email Settings
TO
pradeeka@outlook.com
CONTENT TYPE
text/html
Delete

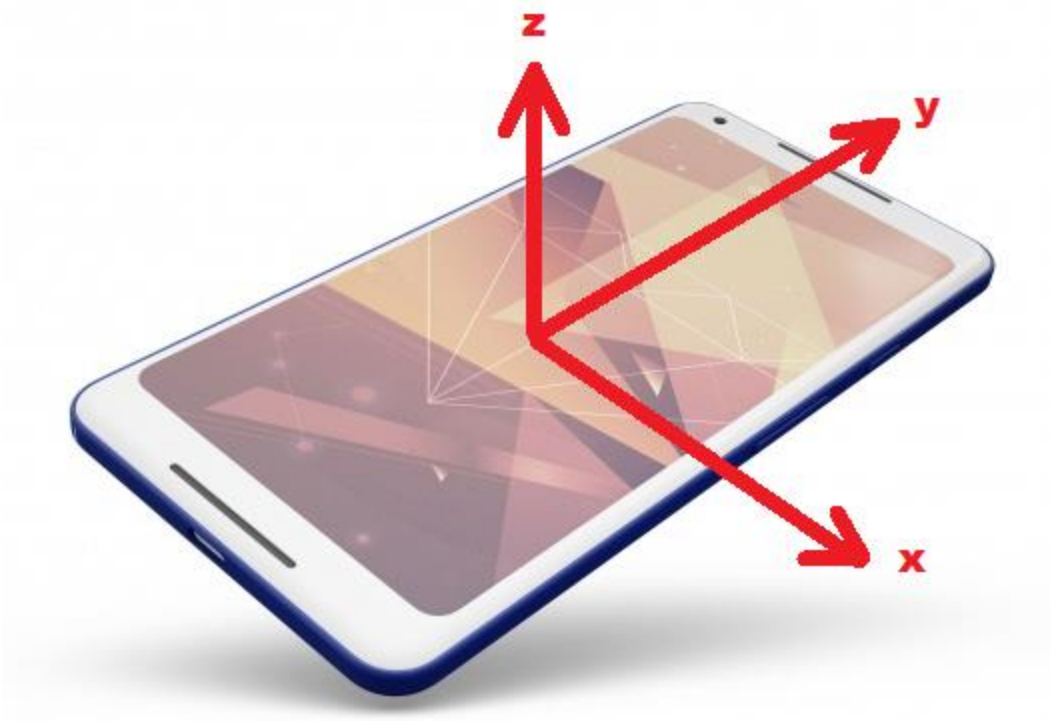
Chapter 6: Connecting with Sensors on Your Mobile Device

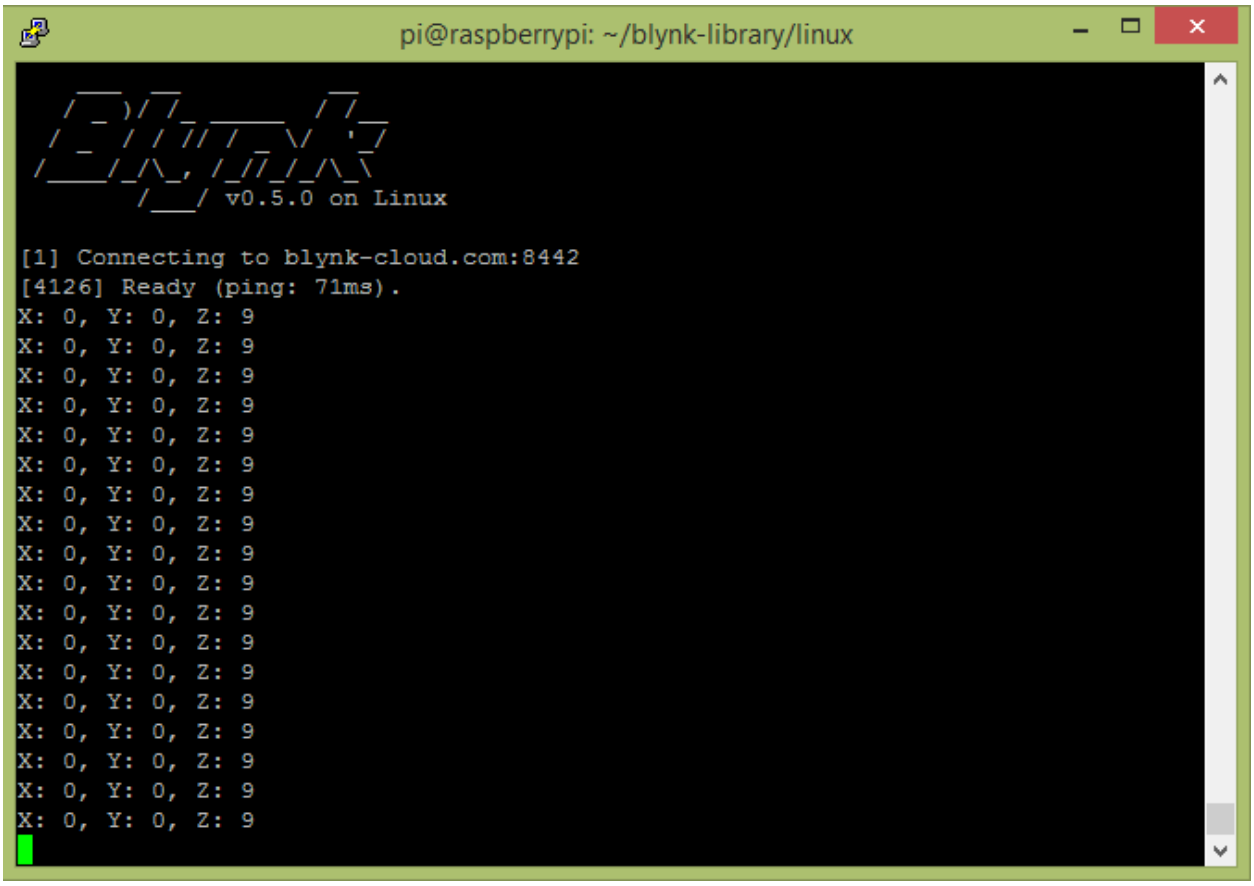


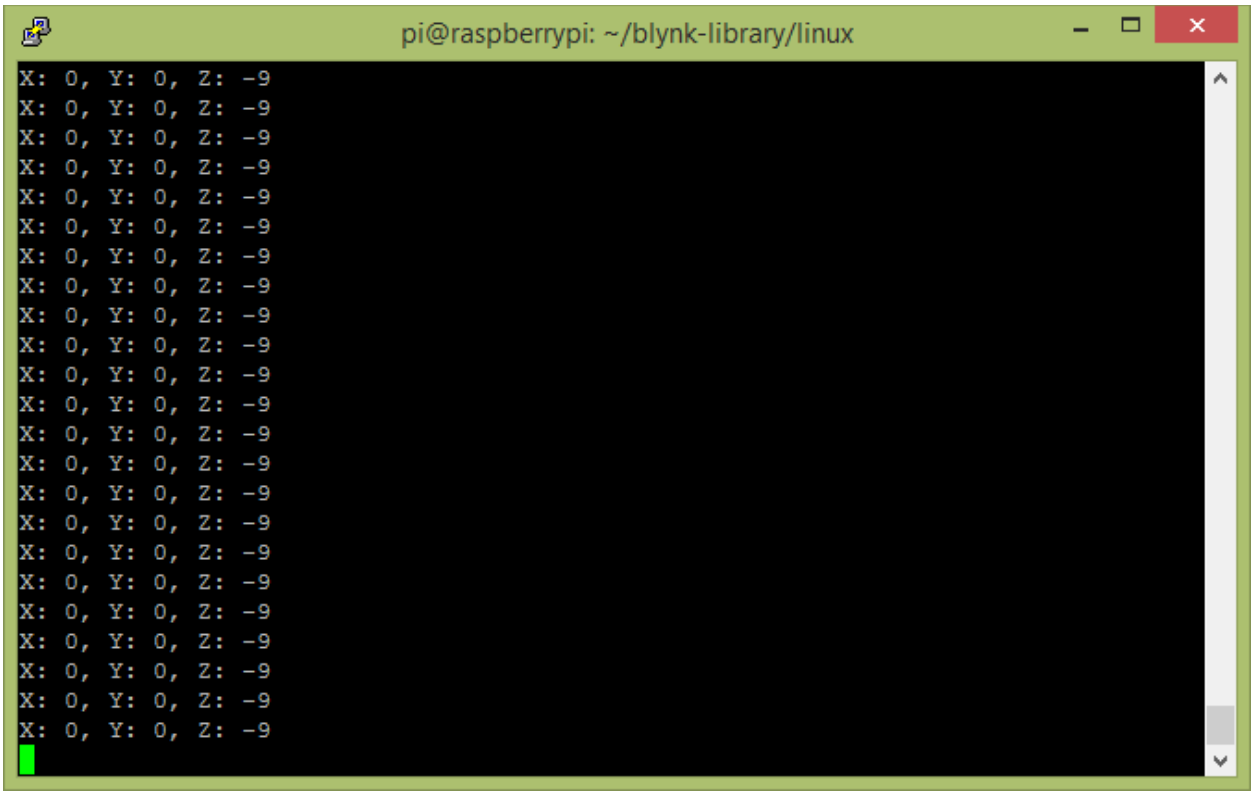

51%
19:19
Smartphone
ACCELERMTR


50% 19:31
Accelerometer Settings
Accelermtr
OUTPUT
V1
X axis
Y axis
Z axis
WRITE INTERVAL
100 ms
Delete

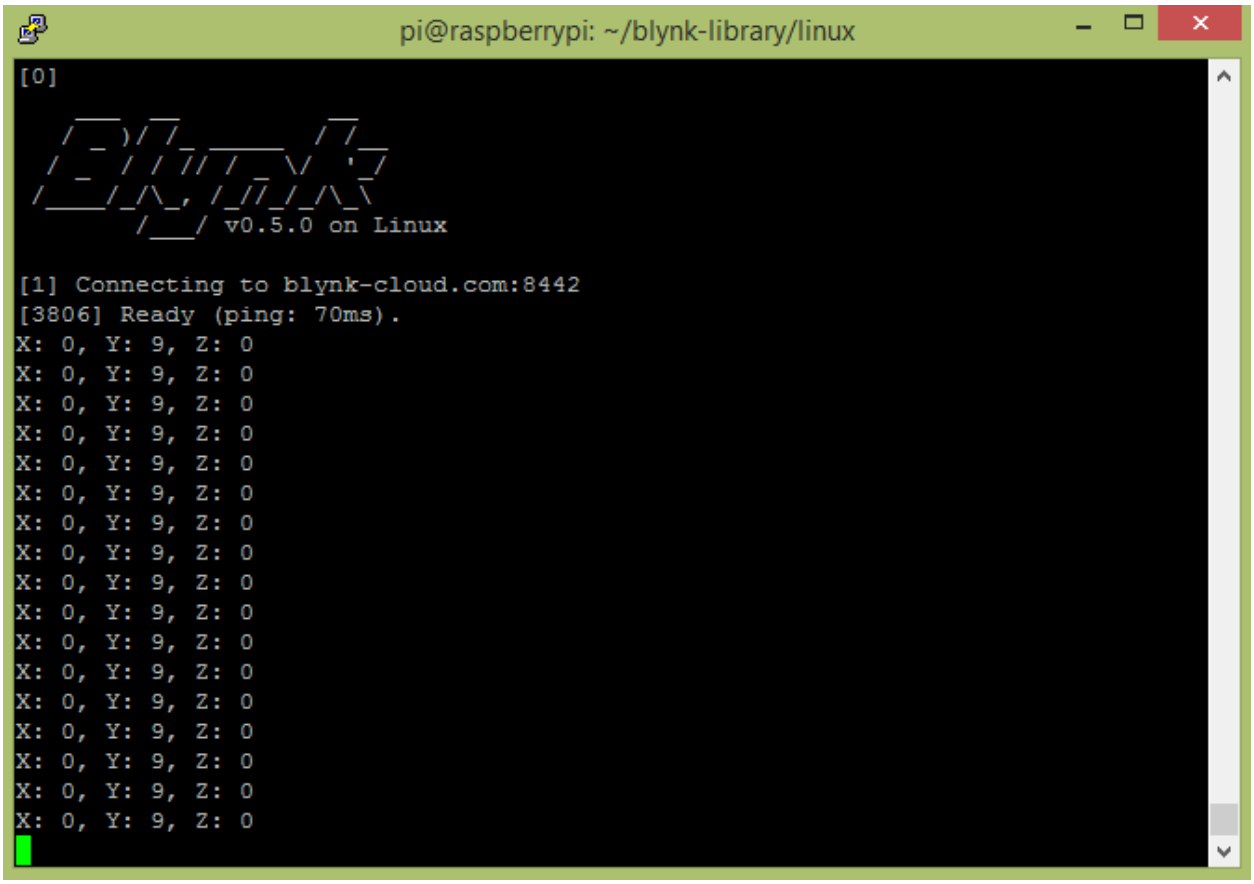

50%
19:30
Smartphone
ACCELERMTR


z
y
x


pi@raspberrypi: ~/blynk-library/linux
v0.5.0 on Linux
[1] Connecting to blynk-cloud.com:8442
[4126] Ready (ping: 71ms).
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9
X: 0, Y: 0, Z: 9

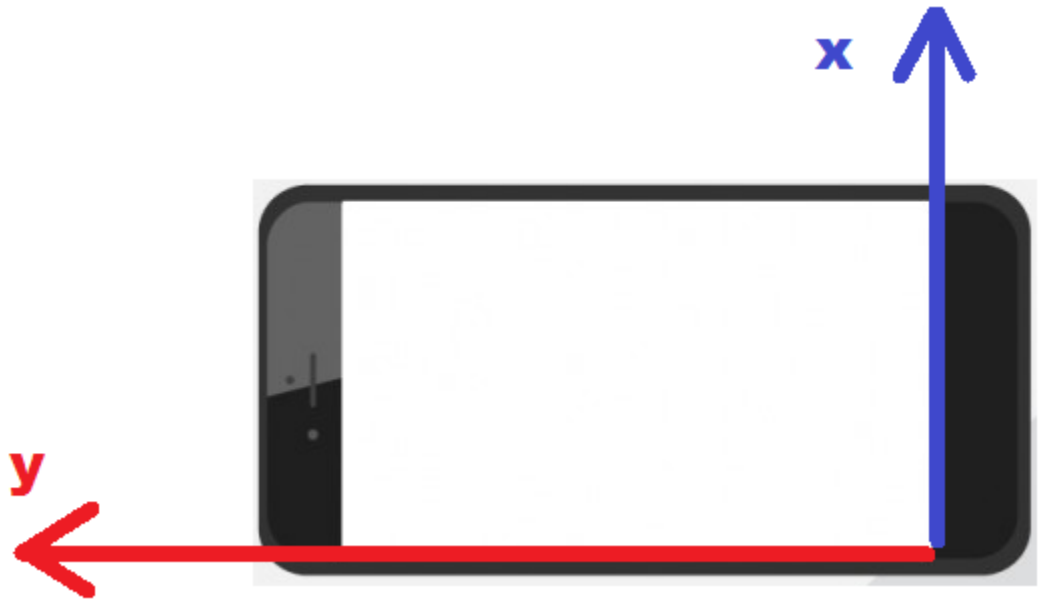

pi@raspberrypi: ~/blynk-library/linux
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9
X: 0, Y: 0, Z: -9

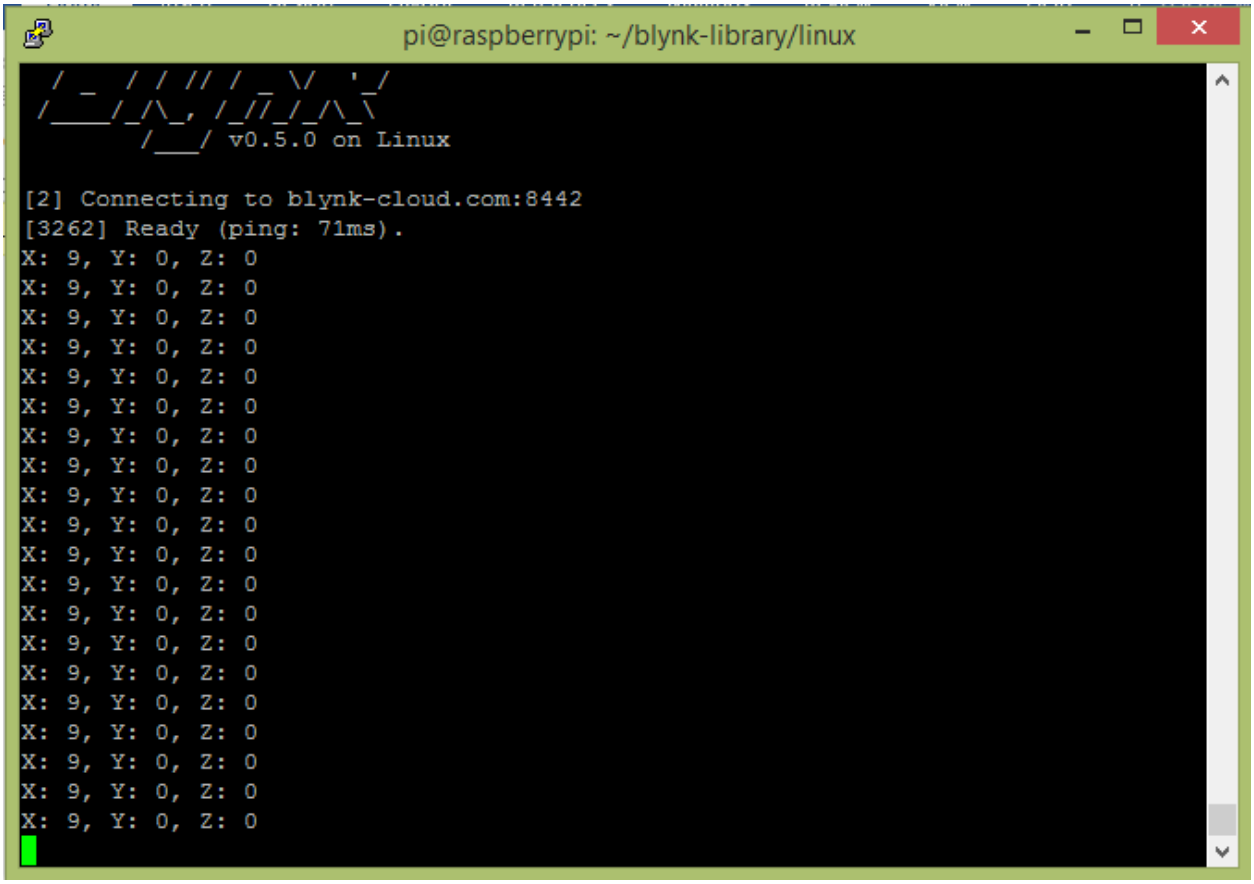
y
x
z
09 38


pi@raspberrypi: ~/blynk-library/linux
[0]
v0.5.0 on Linux
[1] Connecting to blynk-cloud.com:8442
[3806] Ready (ping: 70ms).
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0
X: 0, Y: 9, Z: 0

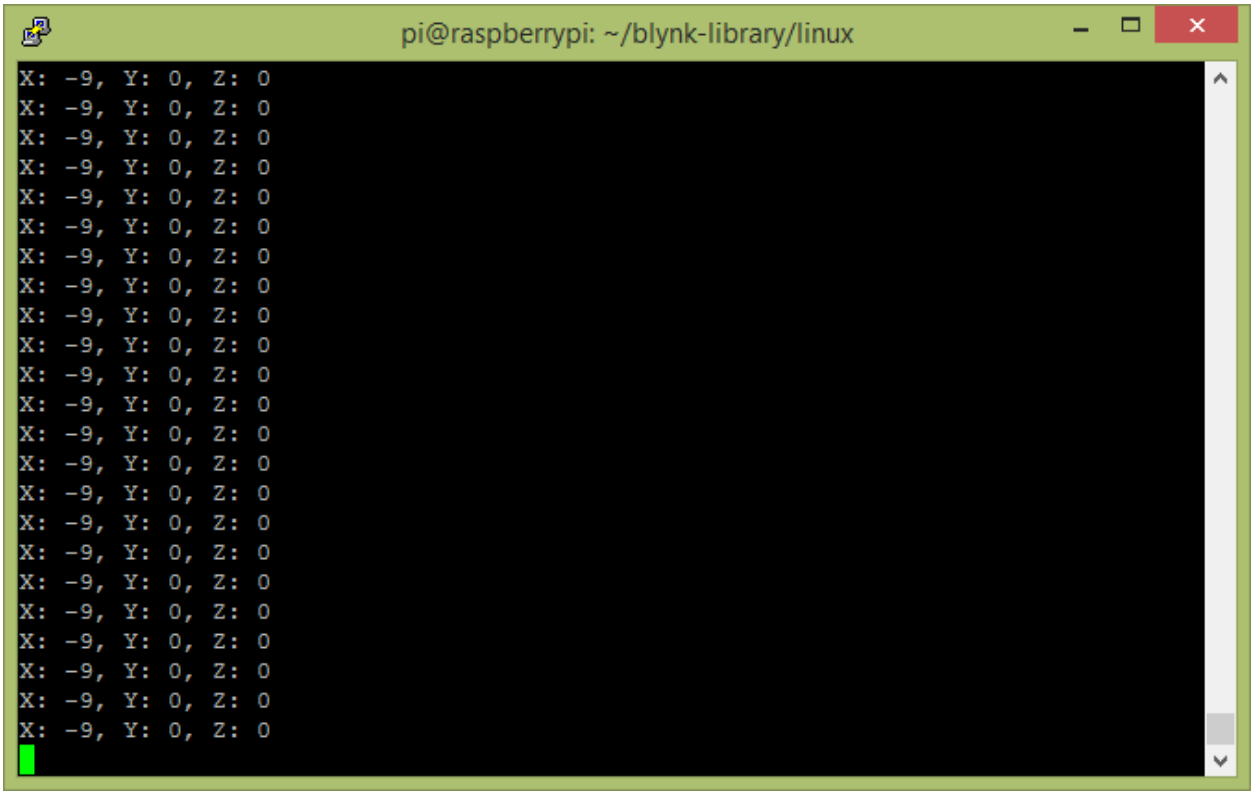
pi@raspberrypi: ~/blynk-library/linux

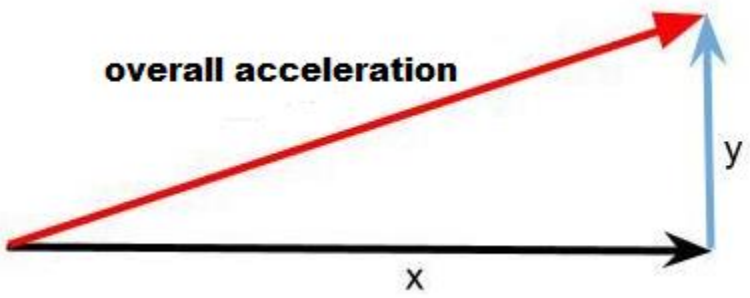
```
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
X: 0, Y: -9, Z: 0
```

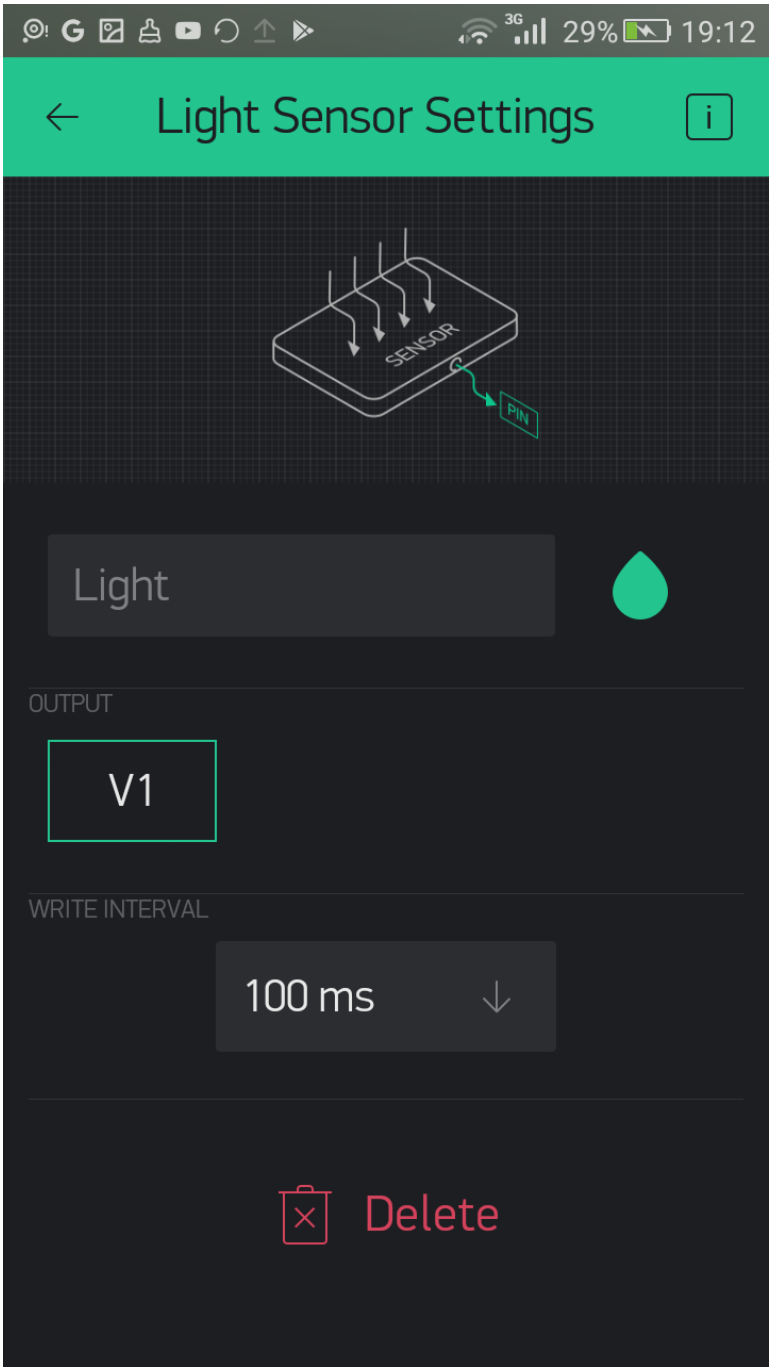


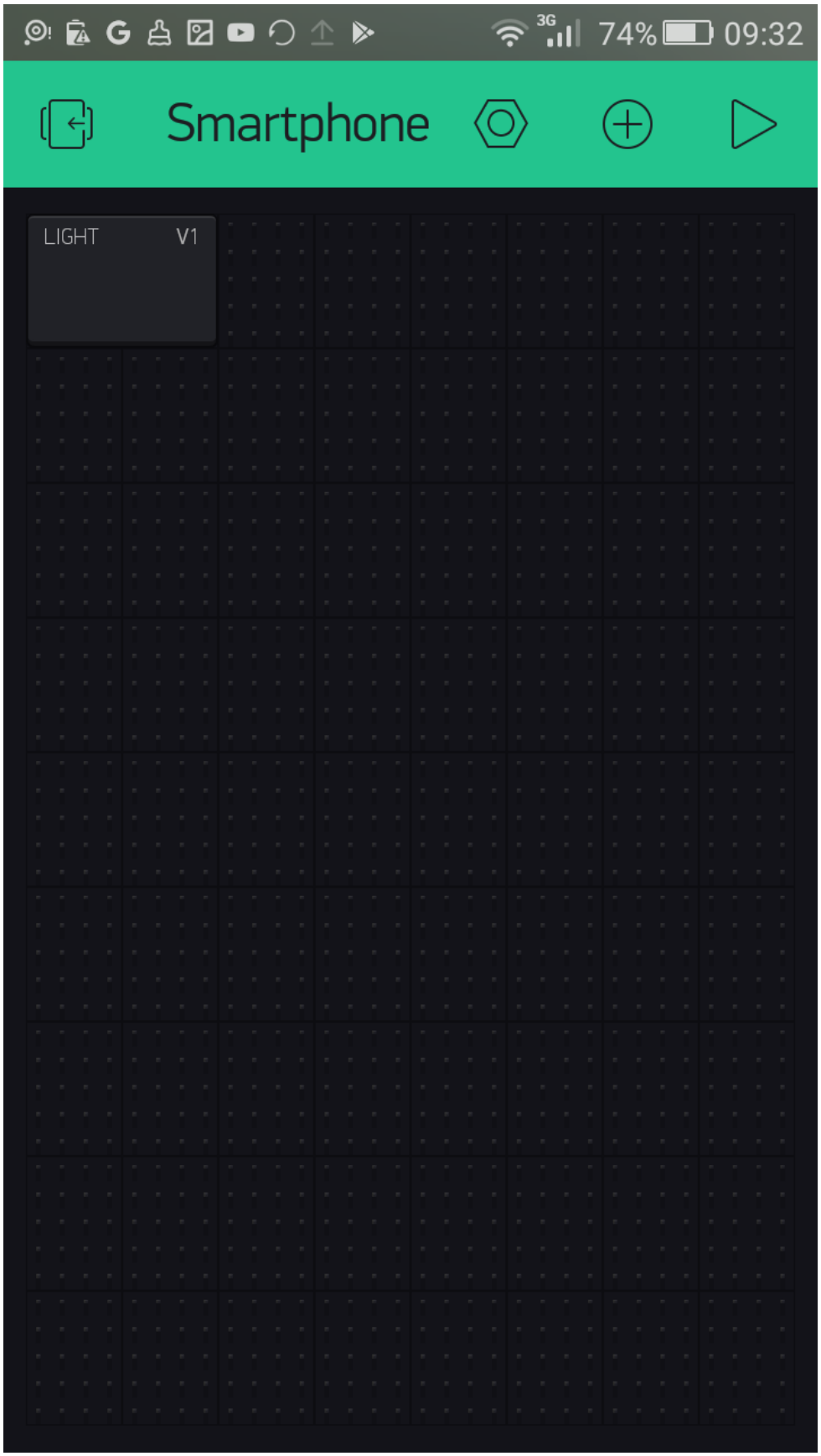

pi@raspberrypi: ~/blynk-library/linux
/ _ / / // / _ \/ '_/
/____/_/_, /_//_/_/_\
/___/ v0.5.0 on Linux
[2] Connecting to blynk-cloud.com:8442
[3262] Ready (ping: 71ms).
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0
X: 9, Y: 0, Z: 0

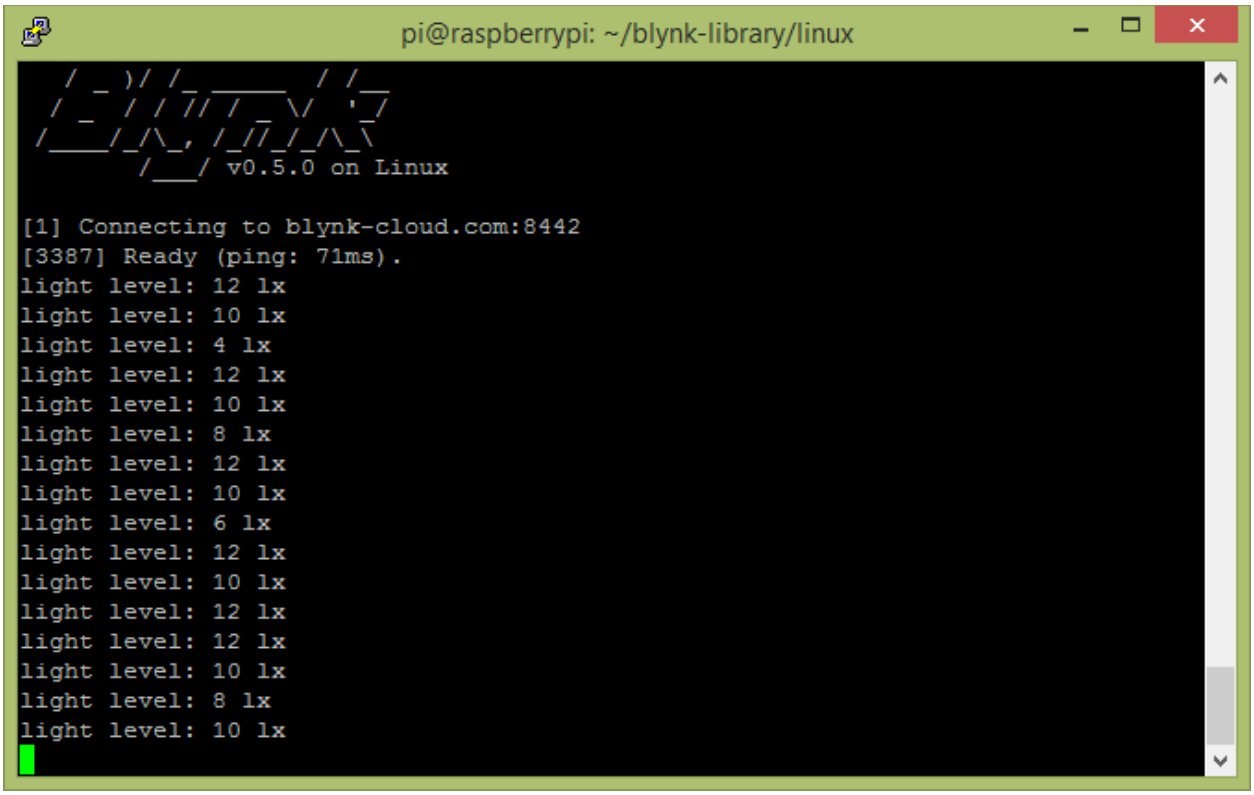
y
x

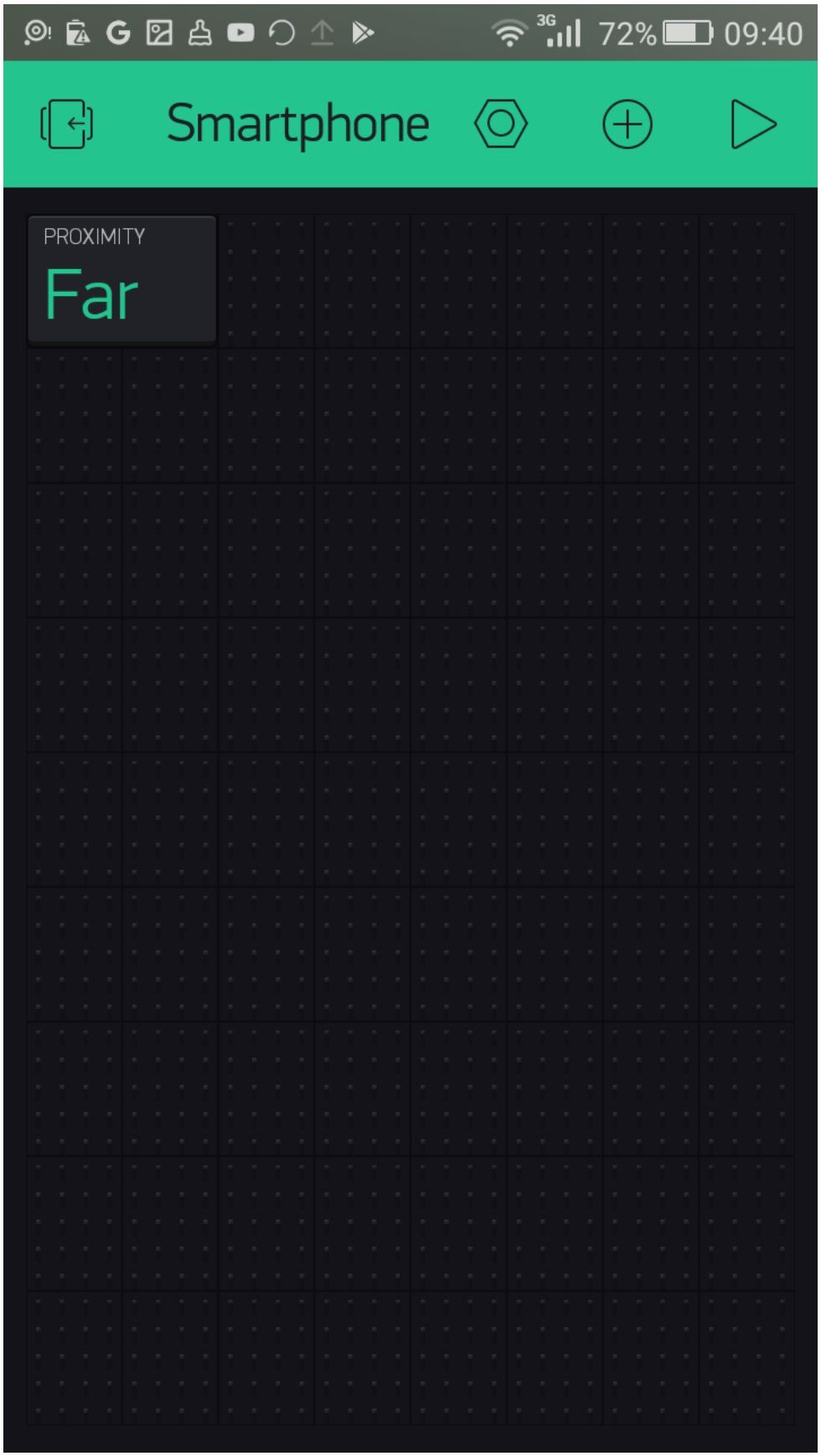

pi@raspberrypi: ~/blynk-library/linux
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0
X: -9, Y: 0, Z: 0

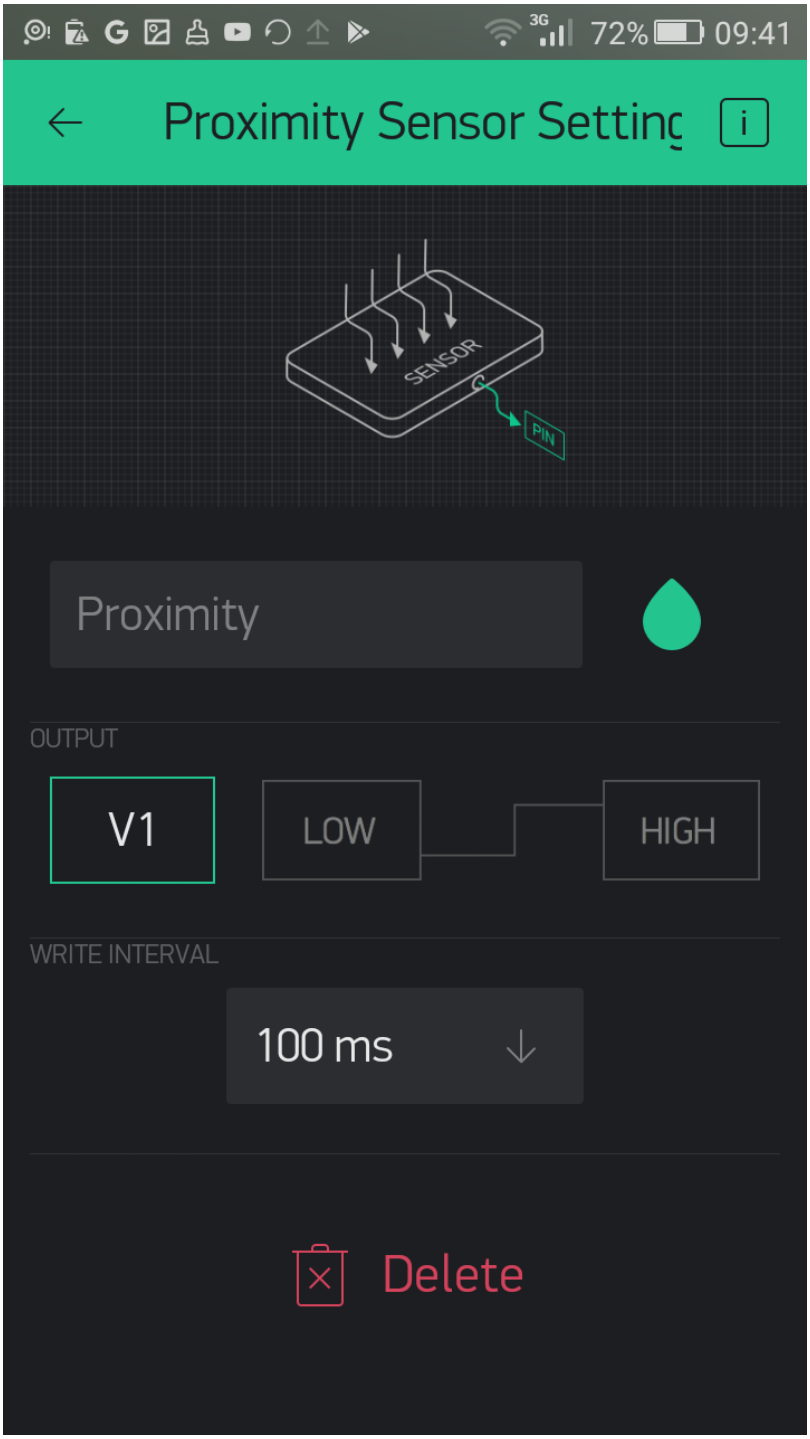

overall acceleration
y
x


29%
19:12
Light Sensor Settings
SENSOR
PIN
Light
OUTPUT
V1
WRITE INTERVAL
100 ms
Delete

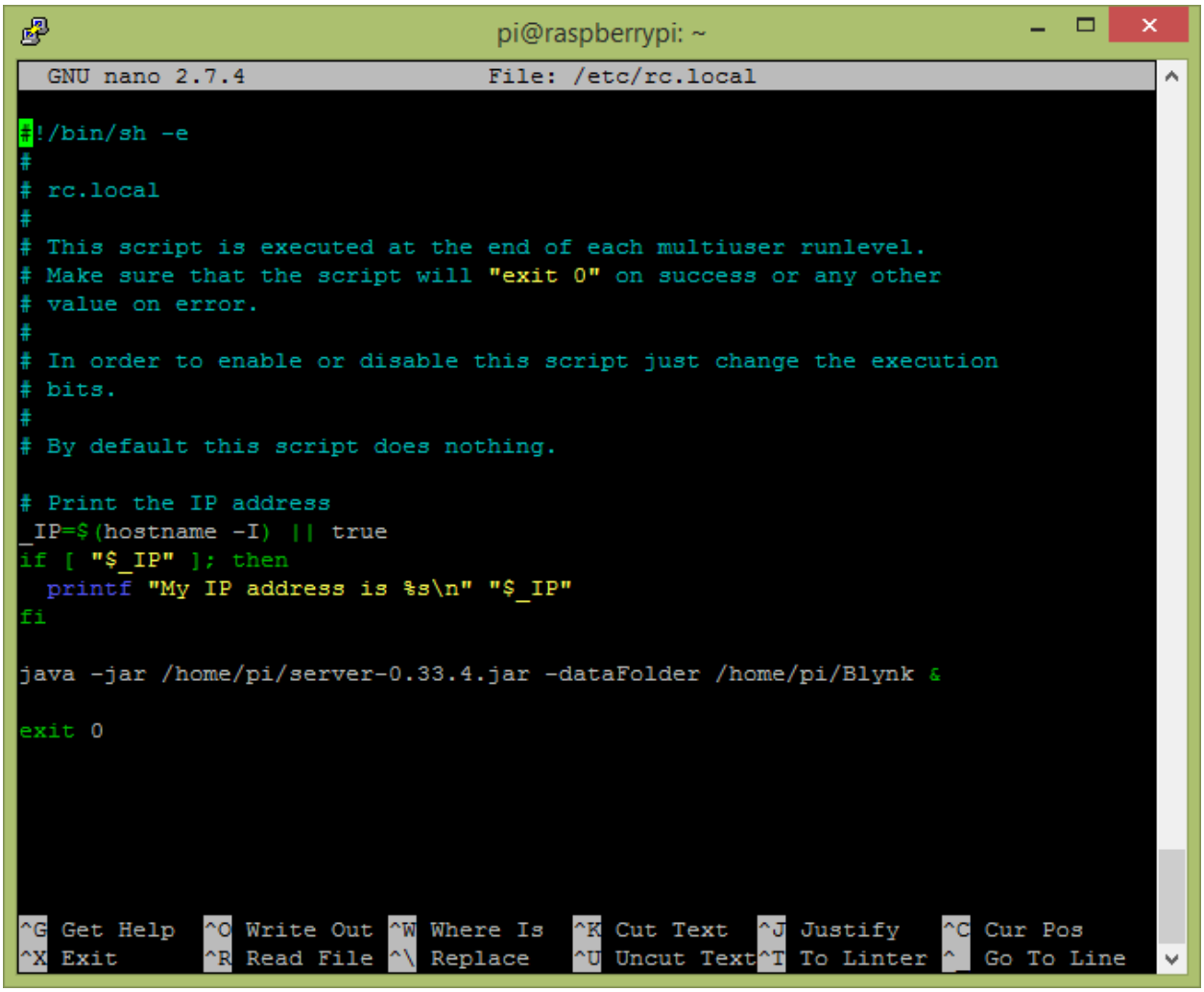

74%
09:32
Smartphone
LIGHT
V1

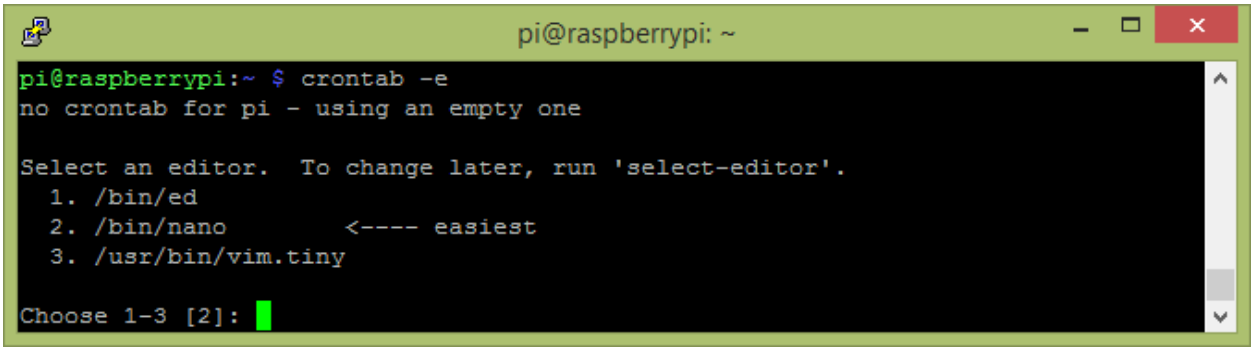

pi@raspberrypi: ~/blynk-library/linux
/ _)/ /_ _____ / /__
/ _ / / // / _ \/ '_/
/____/_/_, /_//_/_/_\
/___/ v0.5.0 on Linux
[1] Connecting to blynk-cloud.com:8442
[3387] Ready (ping: 71ms).
light level: 12 lx
light level: 10 lx
light level: 4 lx
light level: 12 lx
light level: 10 lx
light level: 8 lx
light level: 12 lx
light level: 10 lx
light level: 6 lx
light level: 12 lx
light level: 10 lx
light level: 12 lx
light level: 12 lx
light level: 10 lx
light level: 8 lx
light level: 10 lx

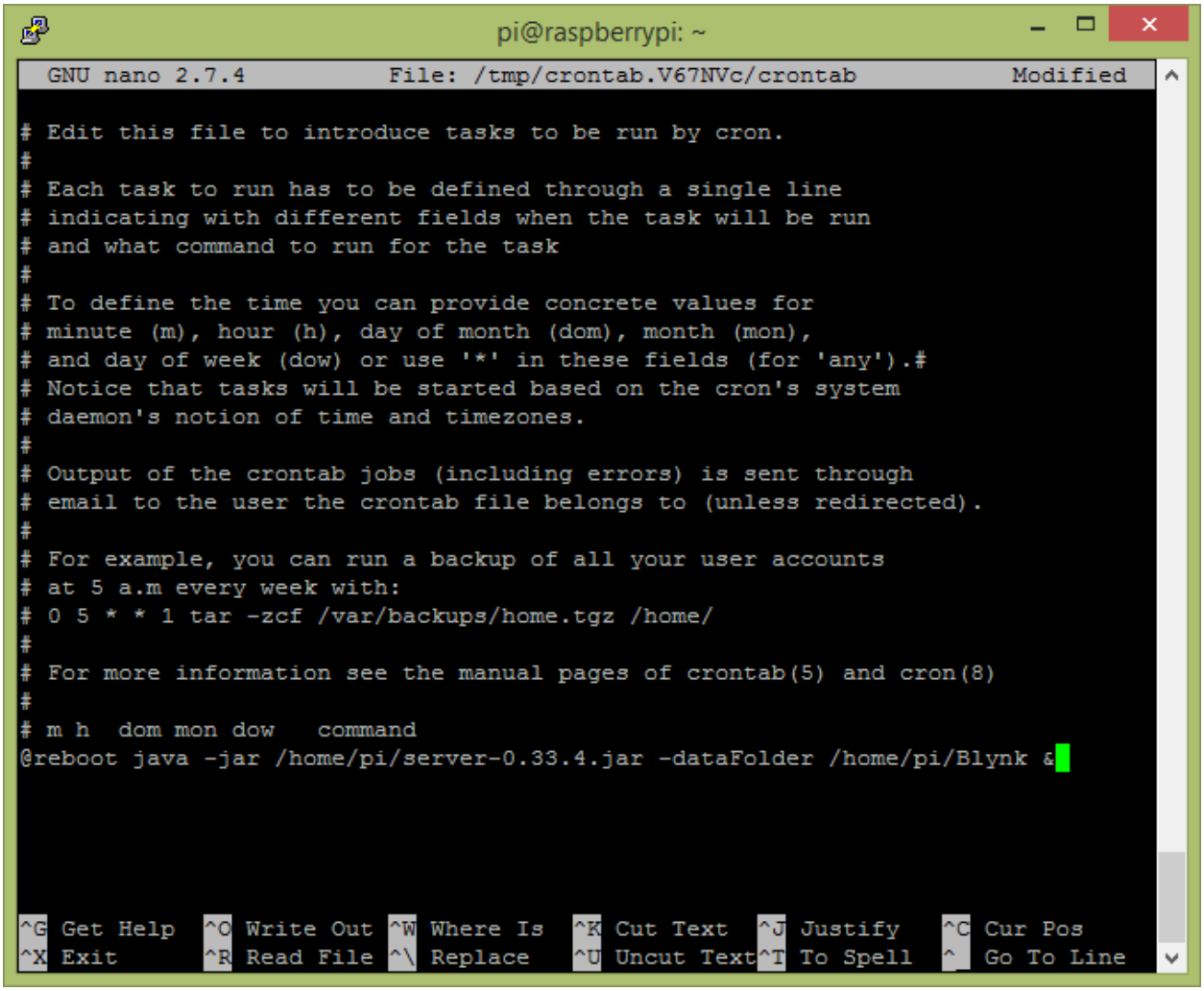

72%
09:40
Smartphone
PROXIMITY
Far

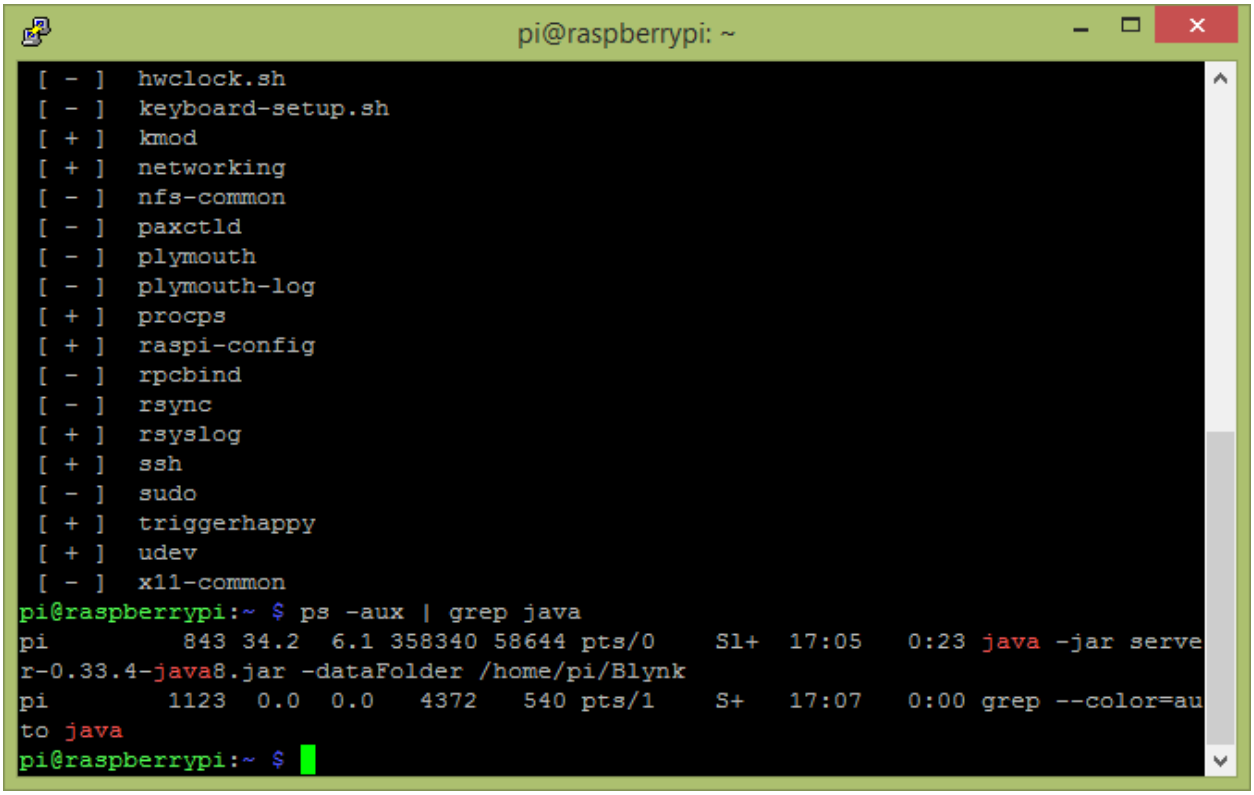

72%
09:41
Proximity Sensor Setting
i
SENSOR
PIN
Proximity
OUTPUT
V1
LOW
HIGH
WRITE INTERVAL
100 ms
Delete

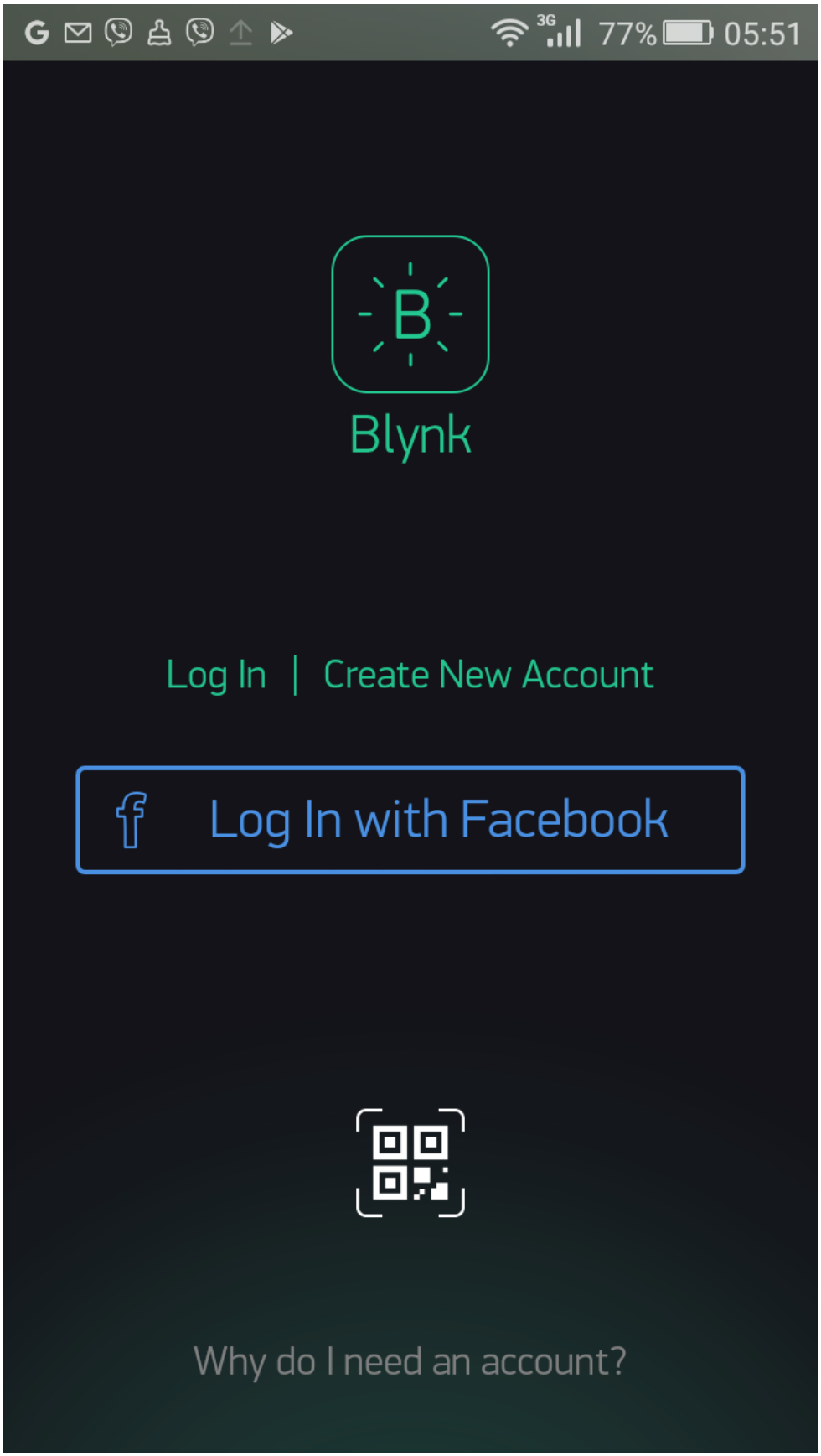
Chapter 7: Setting Up a Personal Blynk Server

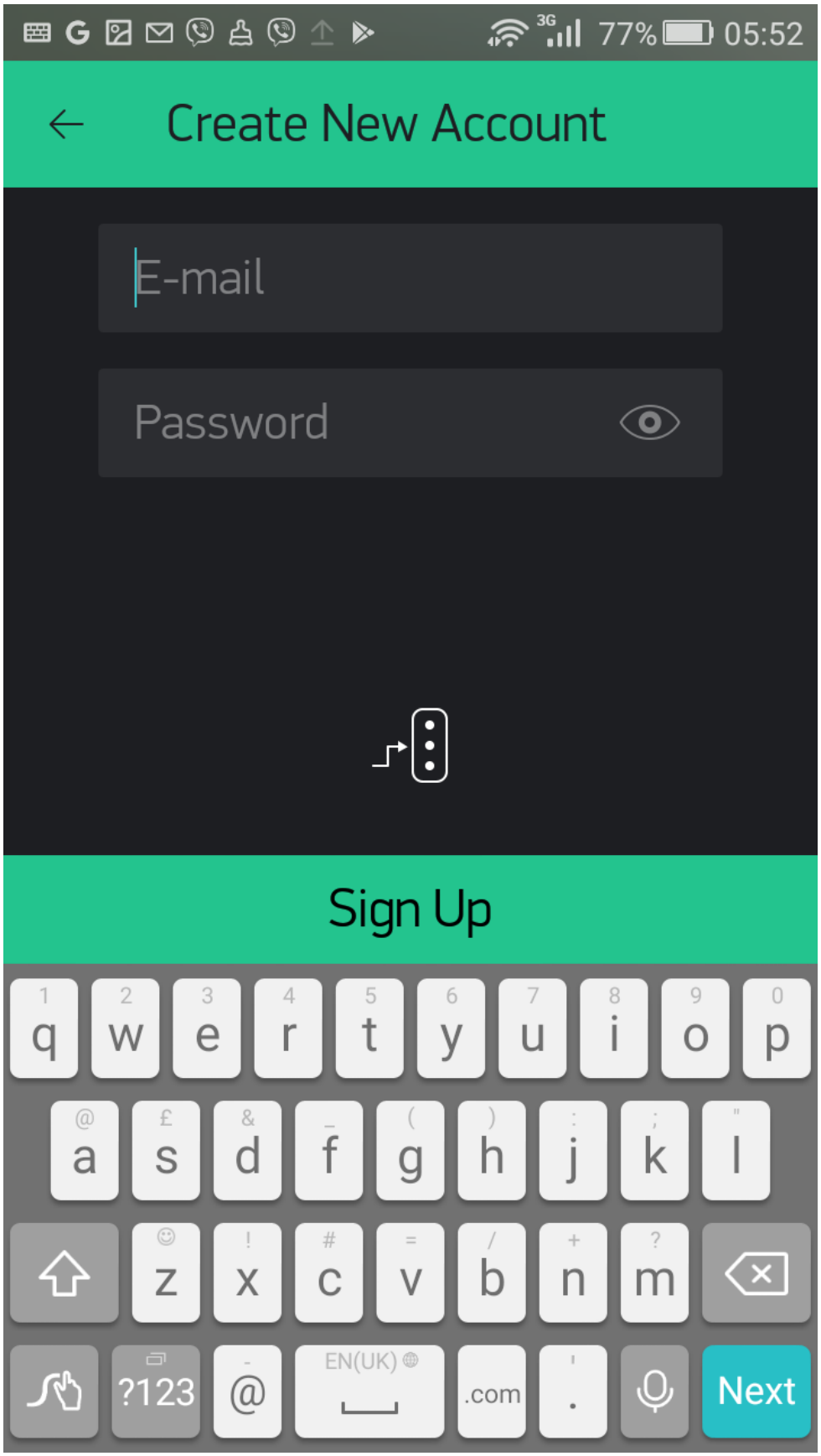


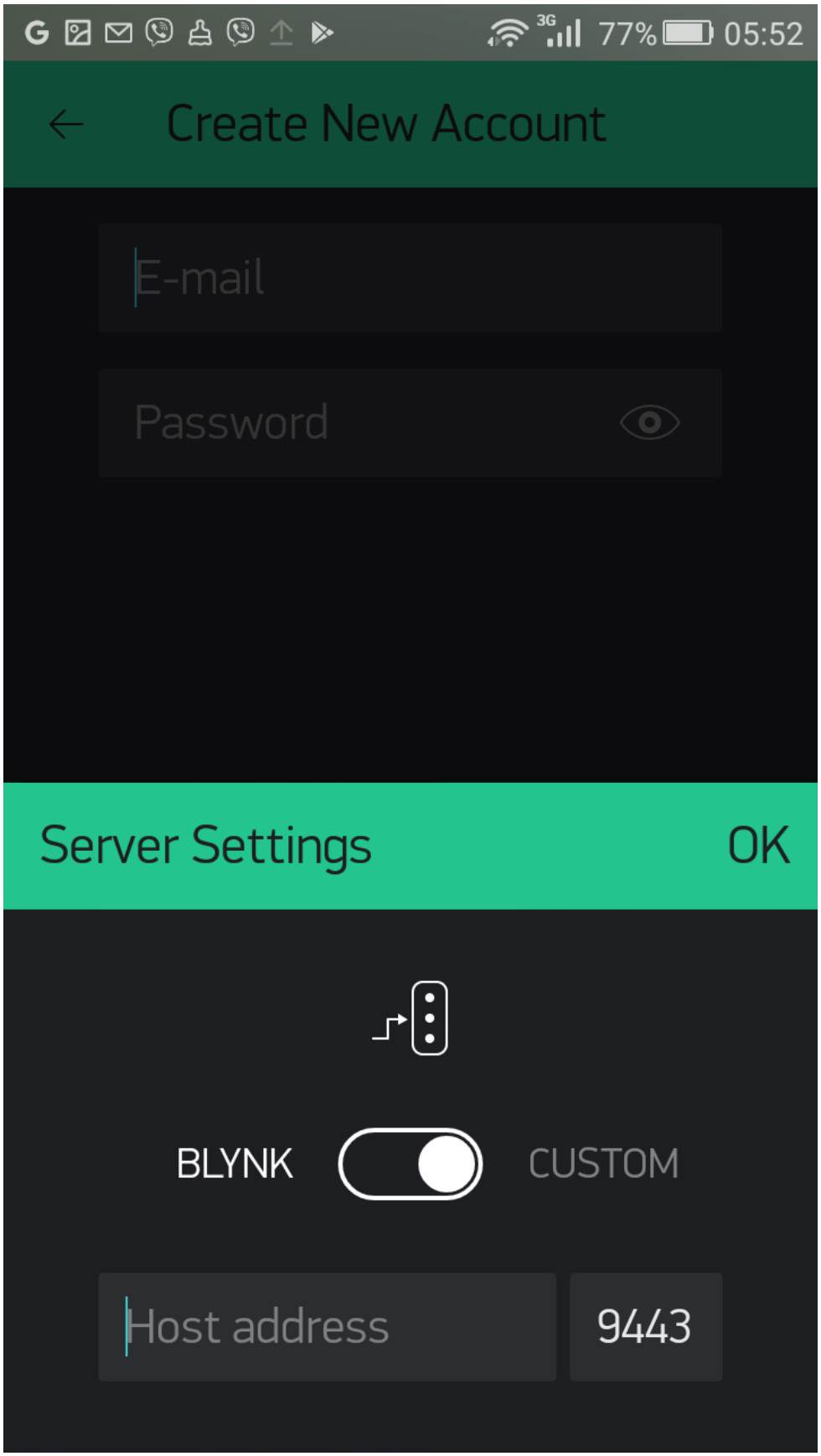


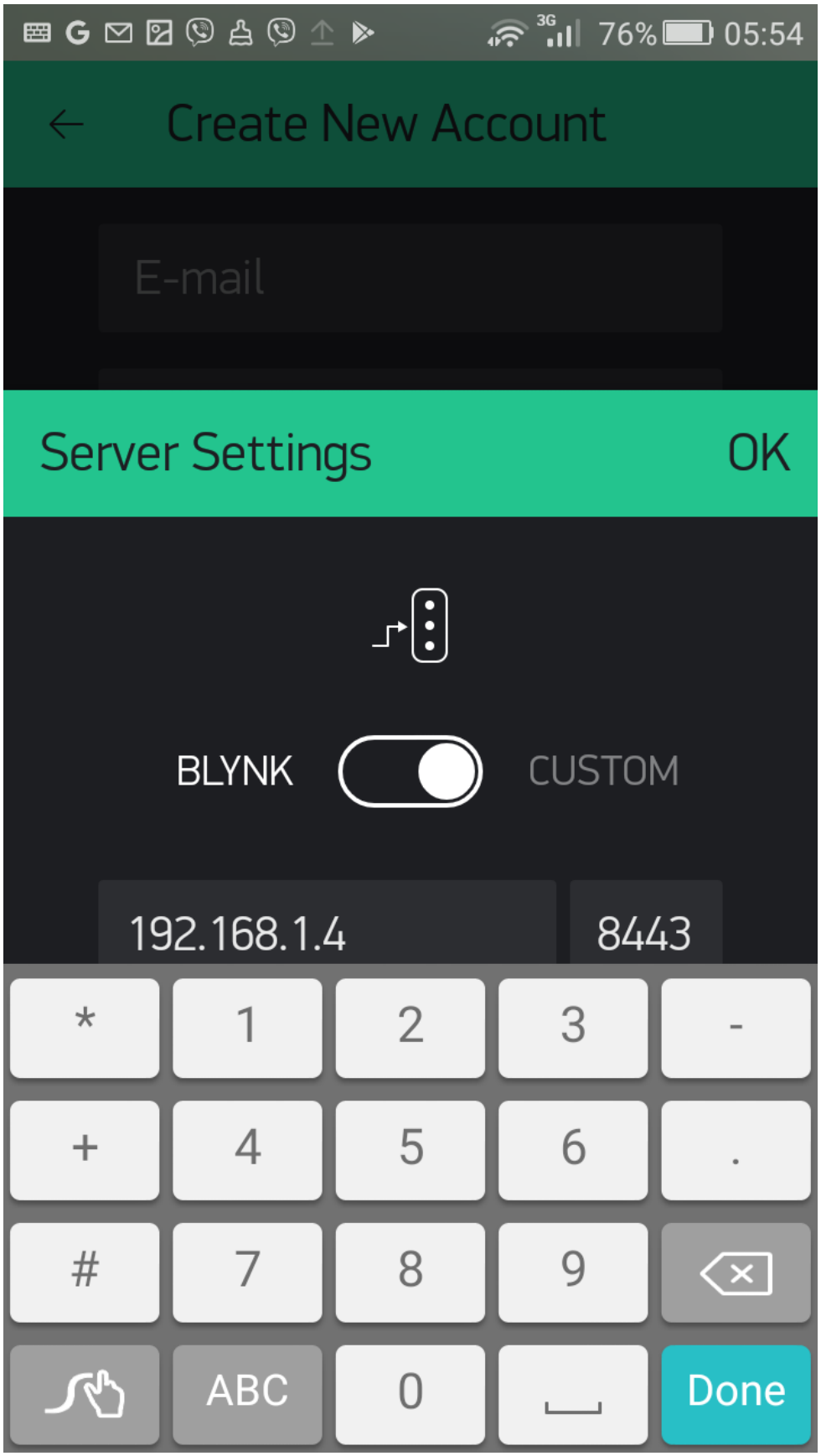

pi@raspberrypi: ~
GNU nano 2.7.4 File: /tmp/crontab.V67NVc/crontab Modified
Edit this file to introduce tasks to be run by cron.
#
Each task to run has to be defined through a single line
indicating with different fields when the task will be run
and what command to run for the task
#
To define the time you can provide concrete values for
minute (m), hour (h), day of month (dom), month (mon),
and day of week (dow) or use '*' in these fields (for 'any').#
Notice that tasks will be started based on the cron's system
daemon's notion of time and timezones.
#
Output of the crontab jobs (including errors) is sent through
email to the user the crontab file belongs to (unless redirected).
#
For example, you can run a backup of all your user accounts
at 5 a.m every week with:
0 5 * * 1 tar -zcf /var/backups/home.tgz /home/
#
For more information see the manual pages of crontab(5) and cron(8)
#
m h dom mon dow command
@reboot java -jar /home/pi/server-0.33.4.jar -dataFolder /home/pi/Blynk &
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos
^X Exit ^R Read File ^\ Replace ^U Uncut Text ^T To Spell ^_ Go To Line


pi@raspberrypi: ~
[-] hwclock.sh
[-] keyboard-setup.sh
[+] kmod
[+] networking
[-] nfs-common
[-] paxctld
[-] plymouth
[-] plymouth-log
[+] procps
[+] raspi-config
[-] rpcbind
[-] rsync
[+] rsyslog
[+] ssh
[-] sudo
[+] triggerhappy
[+] udev
[-] x11-common
pi@raspberrypi:~ $ ps -aux | grep java
pi 843 34.2 6.1 358340 58644 pts/0 Sl+ 17:05 0:23 java -jar server-0.33.4-java8.jar -dataFolder /home/pi/Blynk
pi 1123 0.0 0.0 4372 540 pts/1 S+ 17:07 0:00 grep --color=auto java
pi@raspberrypi:~ $


77%
05:51
Blynk
Log In | Create New Account
Log In with Facebook
Why do I need an account?

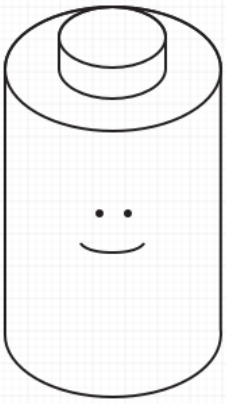

77%
05:52
Create New Account
E-mail
Password
Sign Up
Next


77%
05:52
Create New Account
E-mail
Password
Server Settings
OK
BLYNK
CUSTOM
Host address
9443


76%
05:54
Create New Account
E-mail
Server Settings
OK
BLYNK
CUSTOM
192.168.1.4
8443
*
1
2
3
-
+
4
5
6
.
#
7
8
9
ABC
0
Done

72% 06:10

How energy works

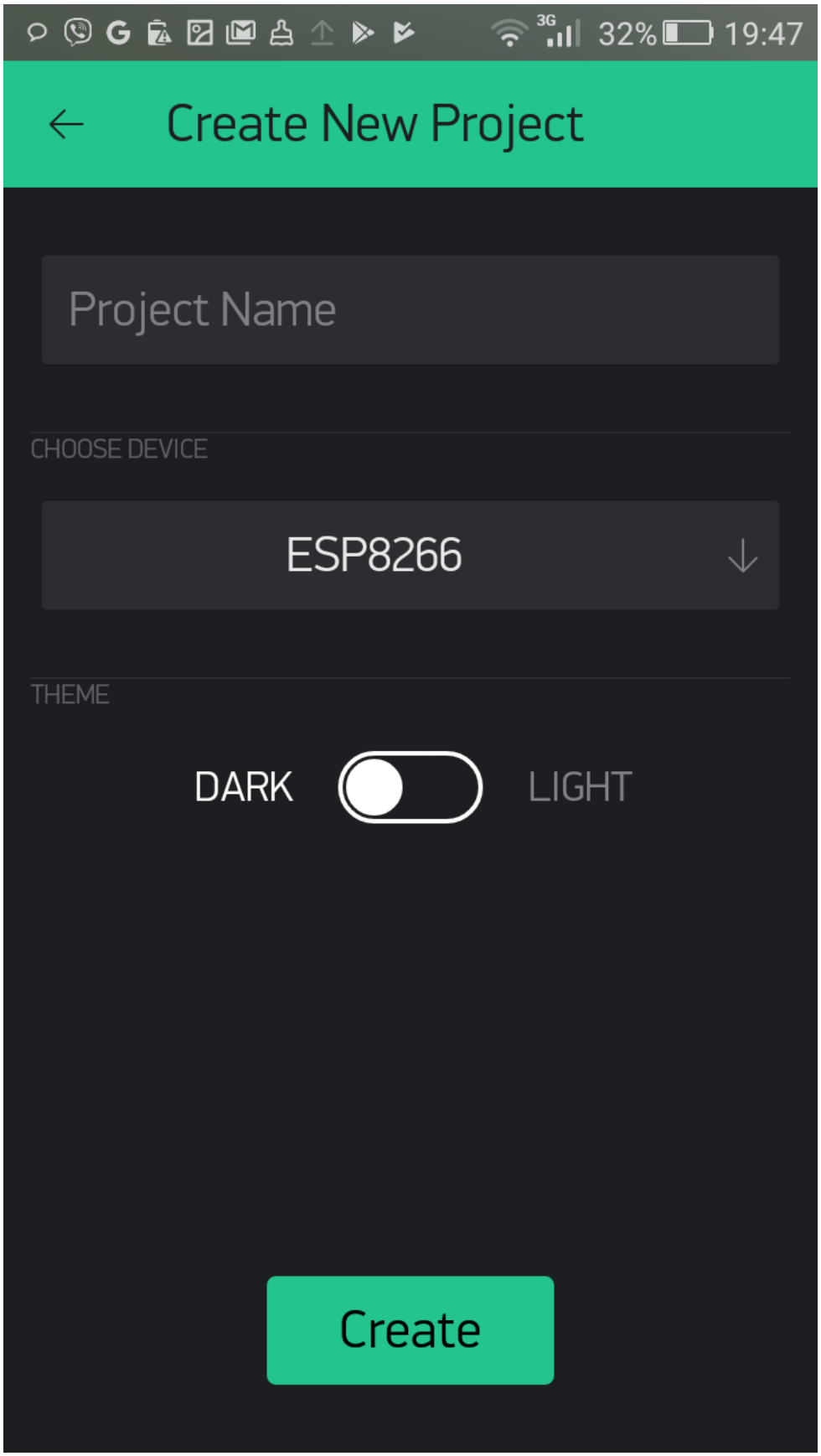


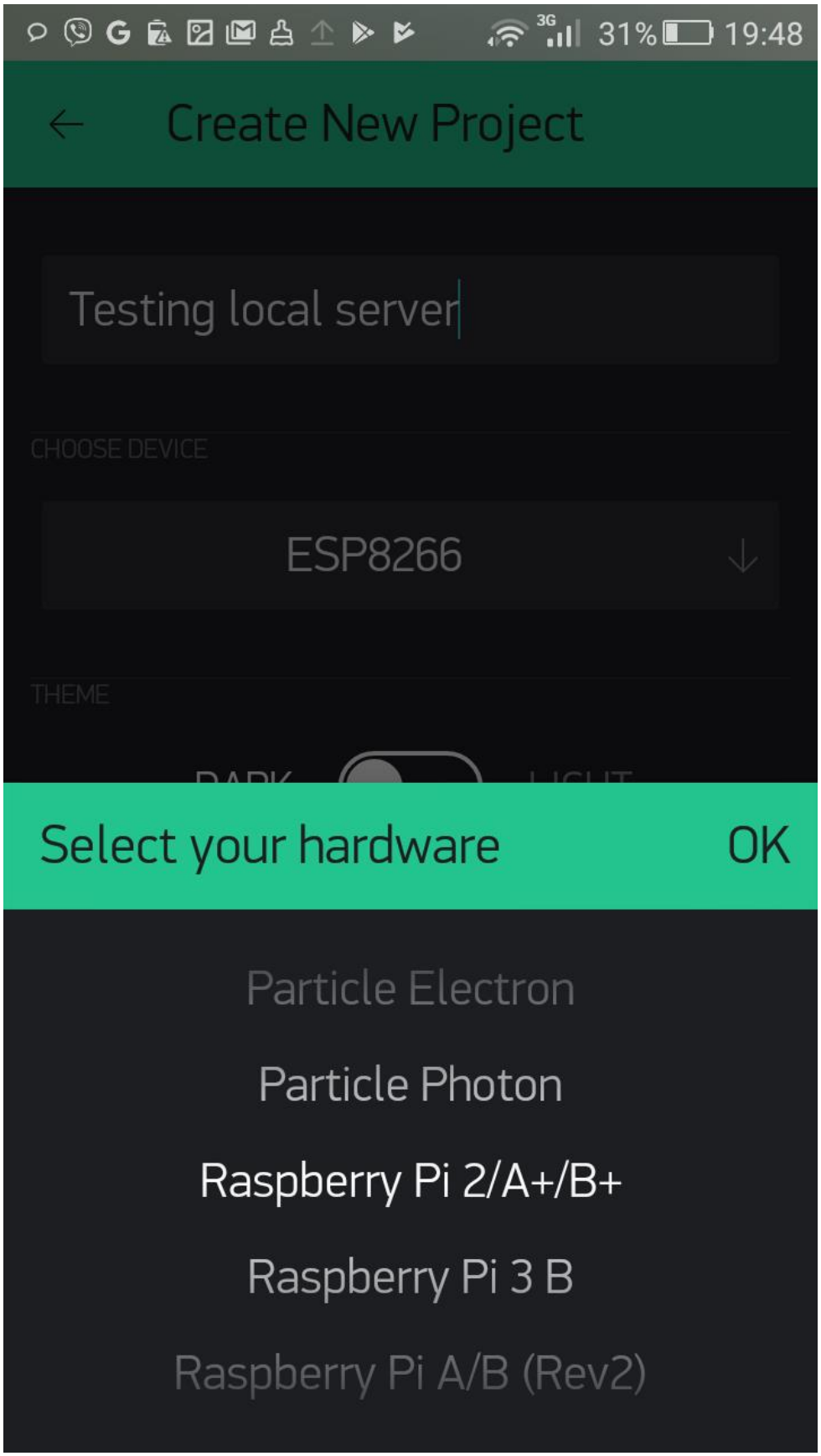
Each widget needs Energy to operate

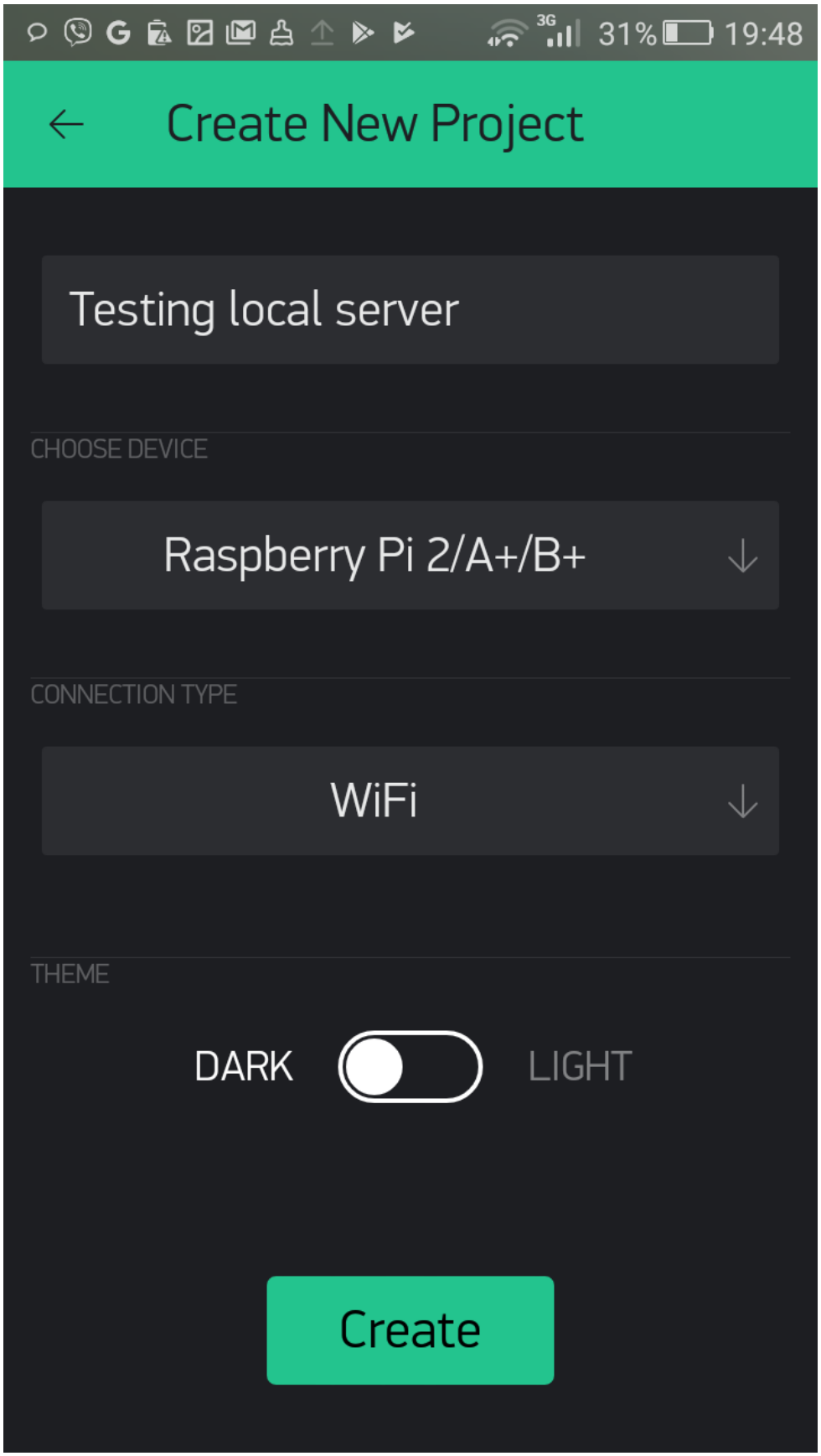
When you delete a widget Energy is returned

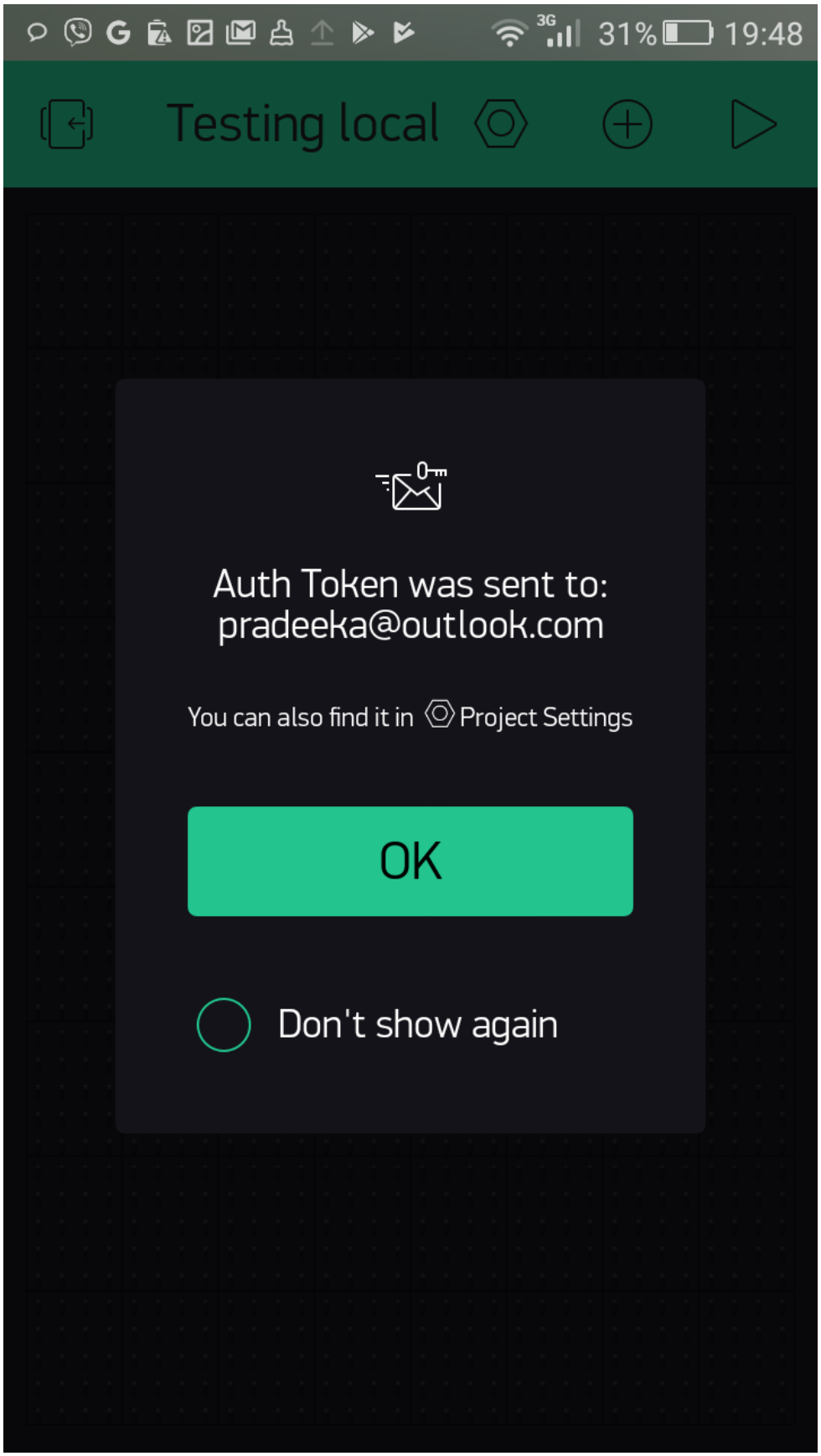
You can always get more Energy in our Store.

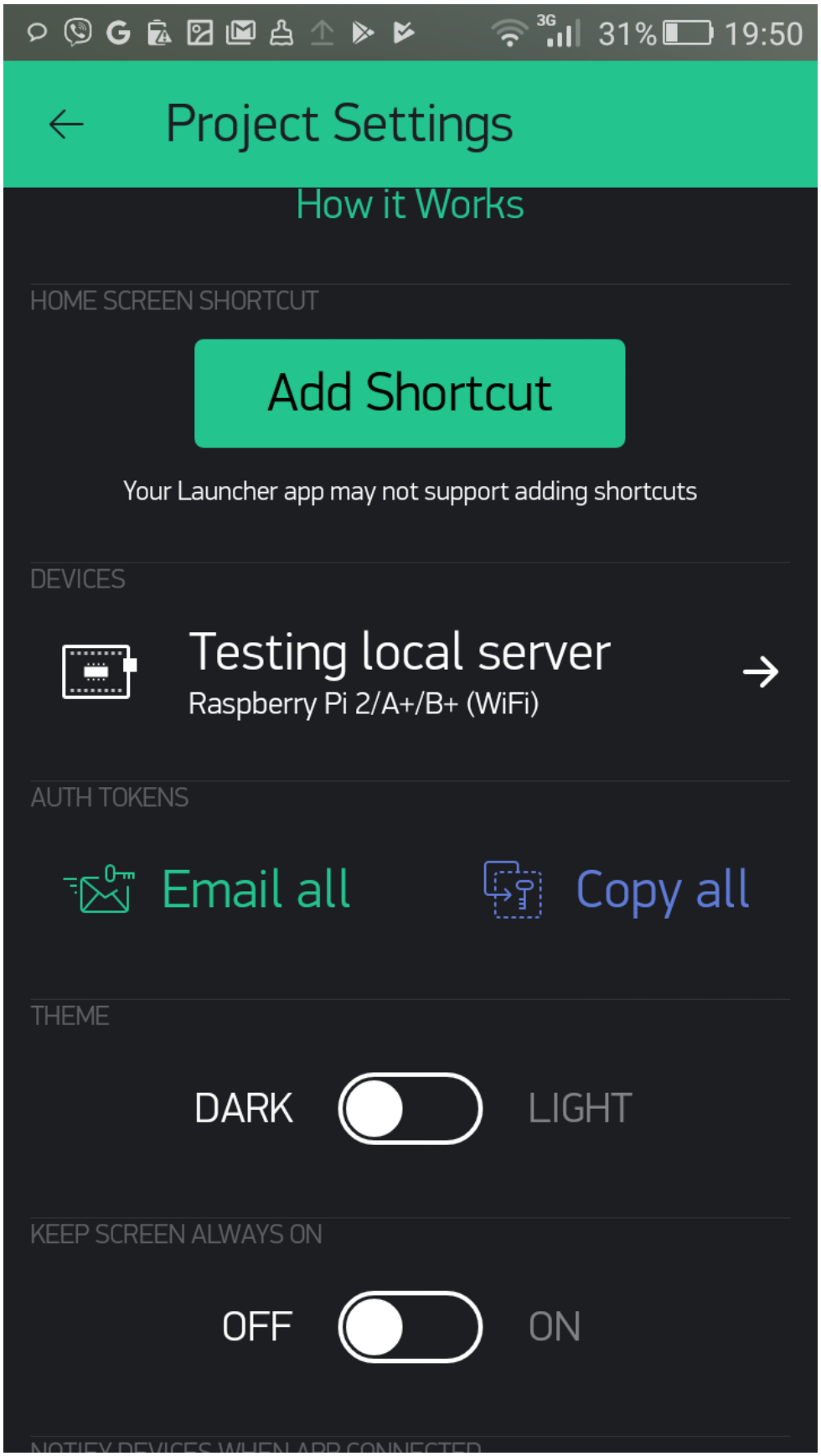
Cool! Got it.

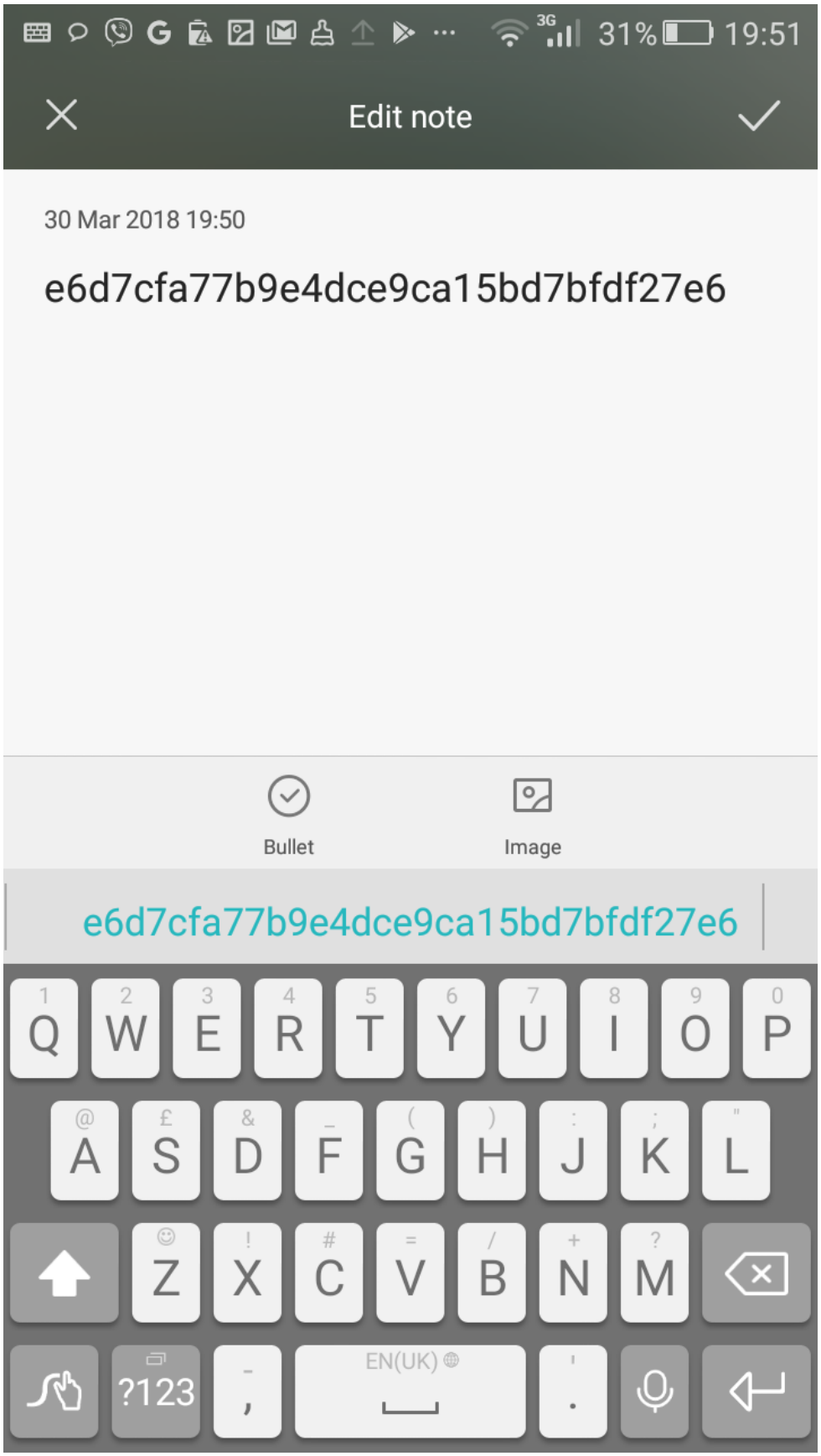

32%
19:47
Create New Project
Project Name
CHOOSE DEVICE
ESP8266
THEME
DARK
LIGHT
Create

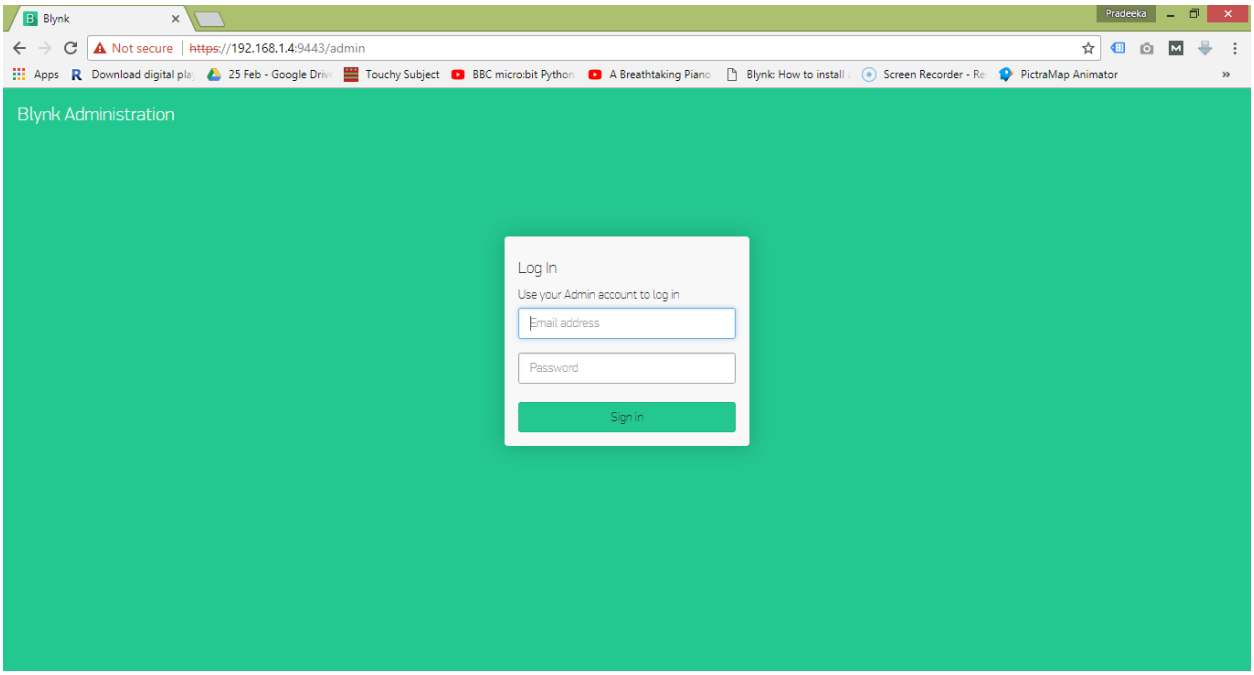

31% 19:48
Create New Project
Testing local server
CHOOSE DEVICE
ESP8266
THEME
Select your hardware
OK
Particle Electron
Particle Photon
Raspberry Pi 2/A+/B+
Raspberry Pi 3 B
Raspberry Pi A/B (Rev2)

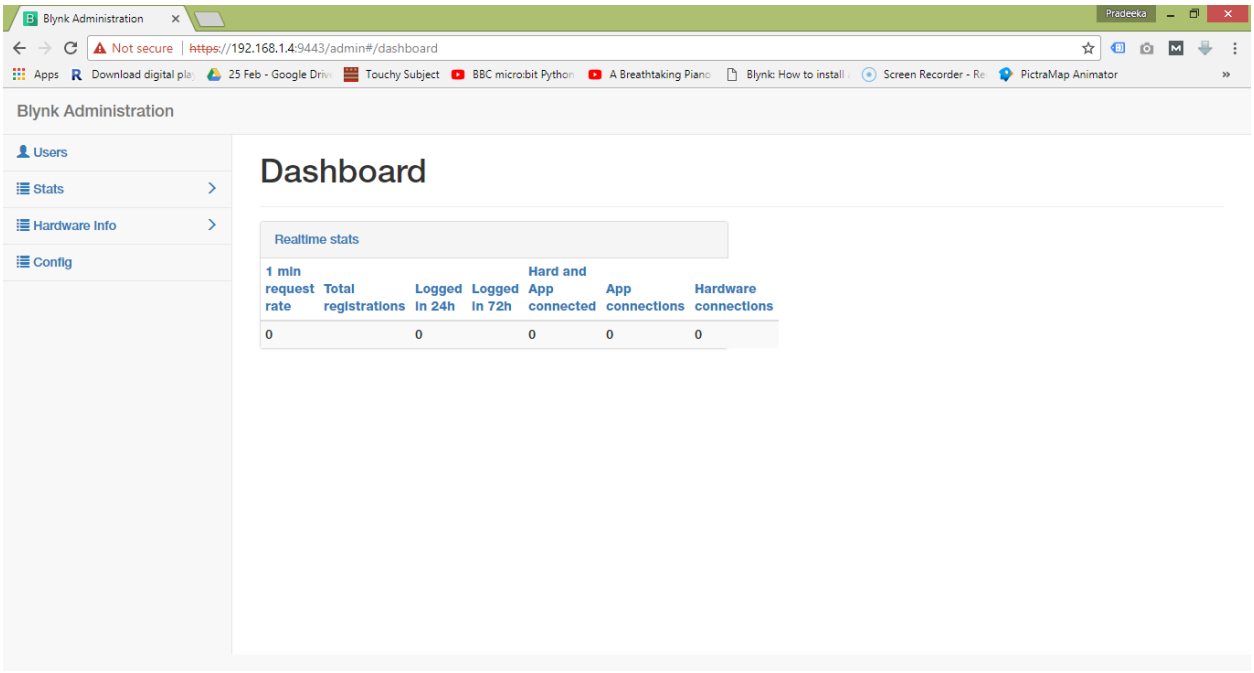

31%
19:48
Create New Project
Testing local server
CHOOSE DEVICE
Raspberry Pi 2/A+/B+
CONNECTION TYPE
WiFi
THEME
DARK
LIGHT
Create

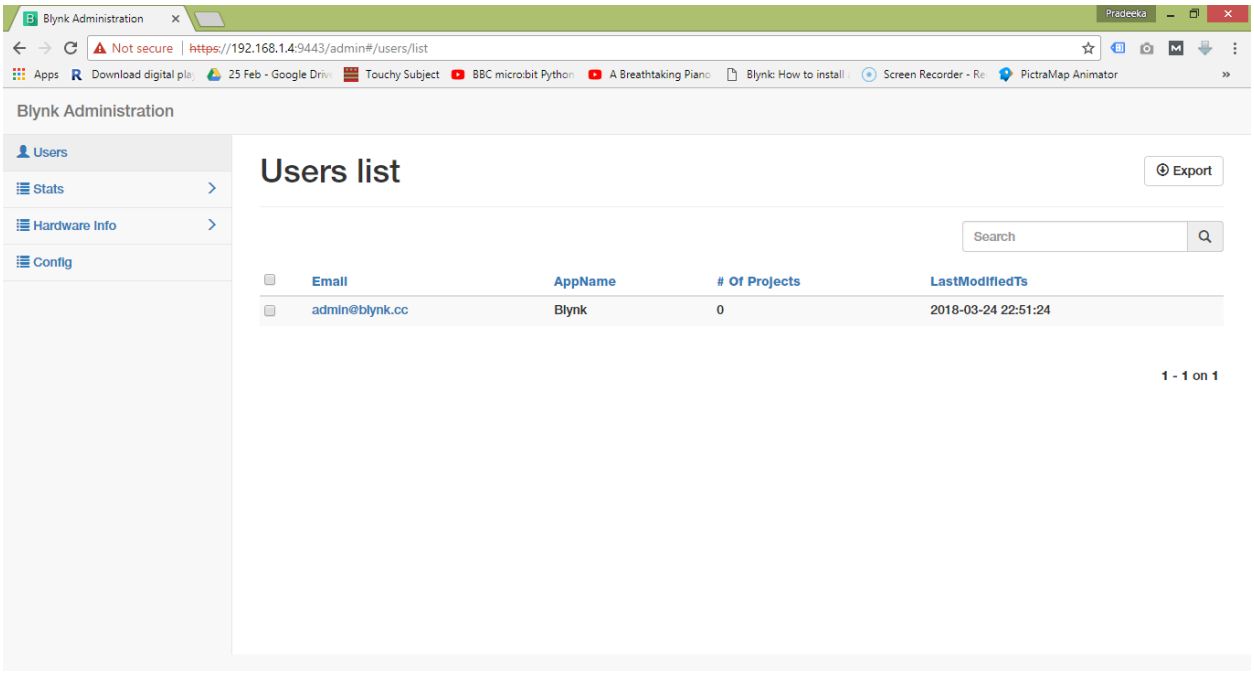

31% 19:48
Testing local
Auth Token was sent to:
pradeeka@outlook.com
You can also find it in Project Settings
OK
Don't show again

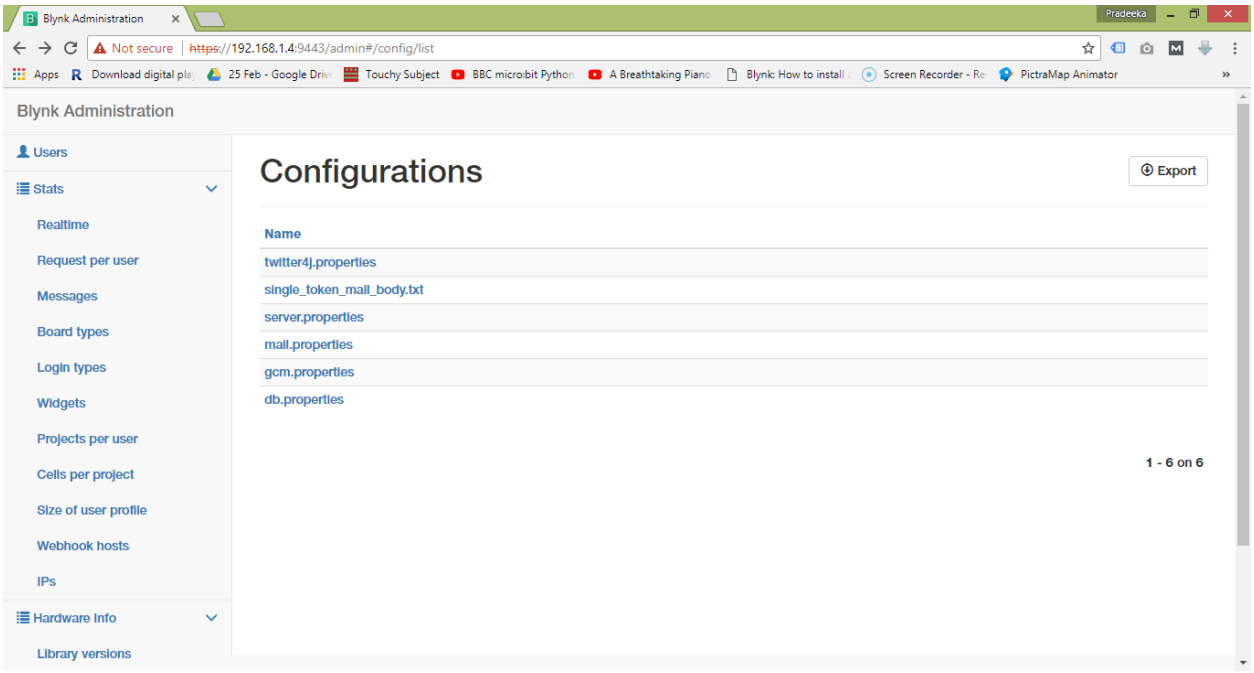

31% 19:50
Project Settings
How it Works
HOME SCREEN SHORTCUT
Add Shortcut
Your Launcher app may not support adding shortcuts
DEVICES
Testing local server
Raspberry Pi 2/A+/B+ (WiFi)
AUTH TOKENS
Email all
Copy all
THEME
DARK
LIGHT
KEEP SCREEN ALWAYS ON
OFF
ON

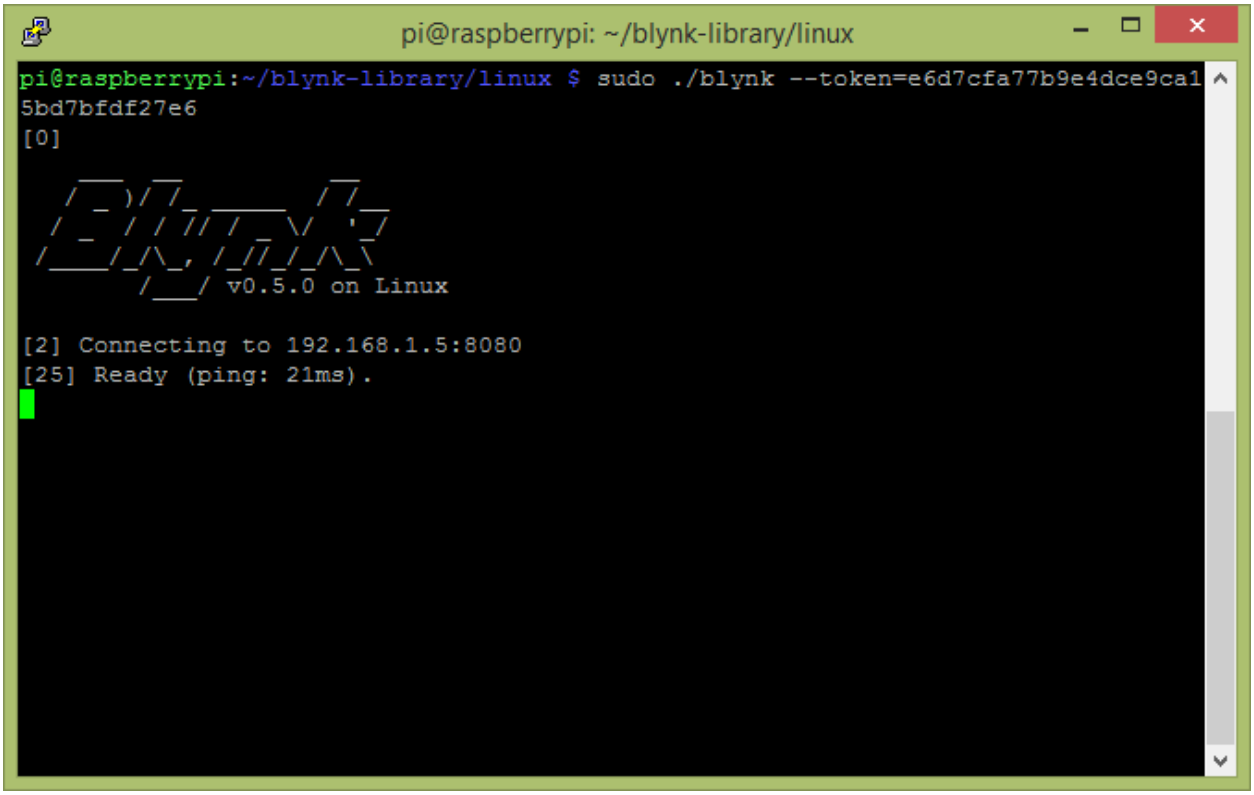

31%
19:51
Edit note
30 Mar 2018 19:50
e6d7cfa77b9e4dce9ca15bd7bfdf27e6
Bullet
Image
e6d7cfa77b9e4dce9ca15bd7bfdf27e6
?123
EN(UK)


Blynk
Pradeeka
Not secure
https://192.168.1.4:9443/admin
Apps
Download digital pla
25 Feb - Google Driv
Touchy Subject
BBC micro:bit Python
A Breathtaking Piano
Blynk: How to install
Screen Recorder - Re
PictraMap Animator
Blynk Administration
Log In
Use your Admin account to log in
Email address
Password
Sign in


Blynk Administration
Pradeeka
Not secure
https://192.168.1.4:9443/admin#/dashboard
Apps
Download digital pla
25 Feb - Google Driv
Touchy Subject
BBC micro:bit Python
A Breathtaking Piano
Blynk: How to install
Screen Recorder - Re
PictraMap Animator
Blynk Administration
Users
Stats
Hardware Info
Config
Dashboard
Realtime stats
1 min request rate
Total registrations
Logged in 24h
Logged in 72h
Hard and App connected
App connections
Hardware connections
0
0
0
0
0

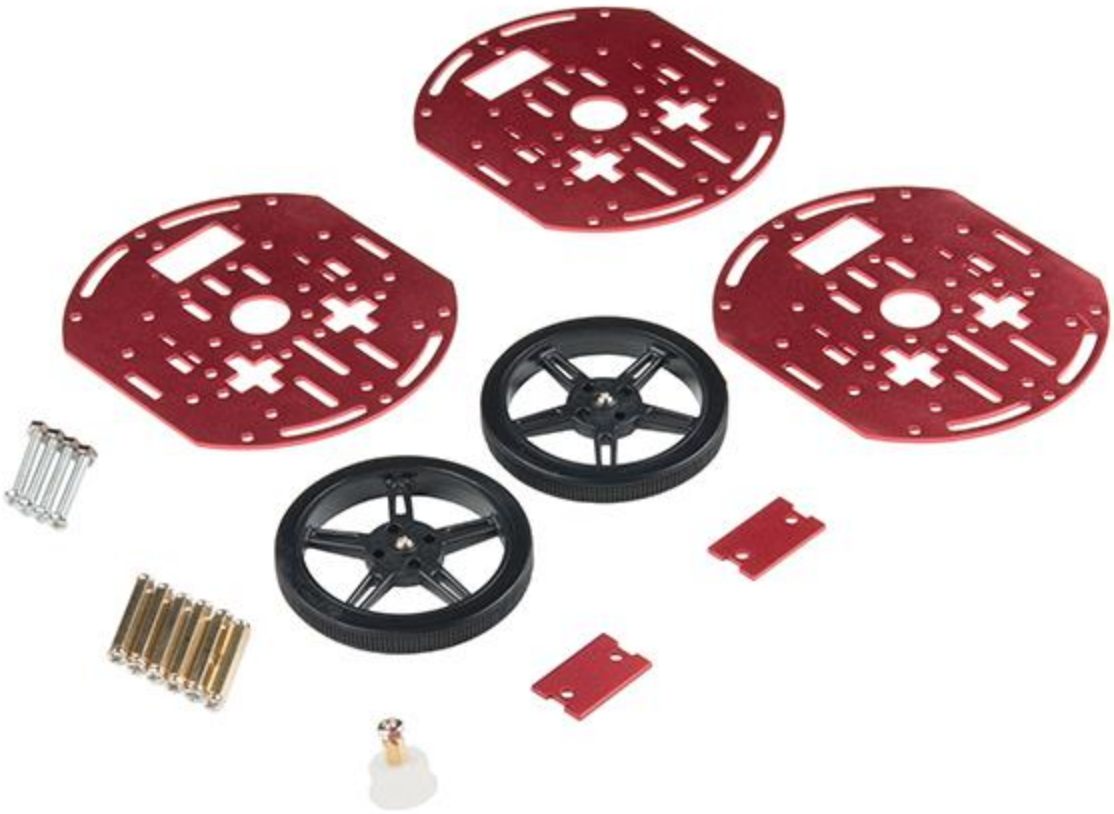

Blynk Administration
Pradeeka
Not secure
https://192.168.1.4:9443/admin#/users/list
Apps
Download digital pla
25 Feb - Google Driv
Touchy Subject
BBC micro:bit Python
A Breathtaking Piano
Blynk: How to install
Screen Recorder - Re
PictraMap Animator
Blynk Administration
Users
Stats
Hardware Info
Config
Users list
Export
Search
Email
AppName
Of Projects
LastModifiedTs
admin@blynk.cc
Blynk
0
2018-03-24 22:51:24
1 - 1 on 1

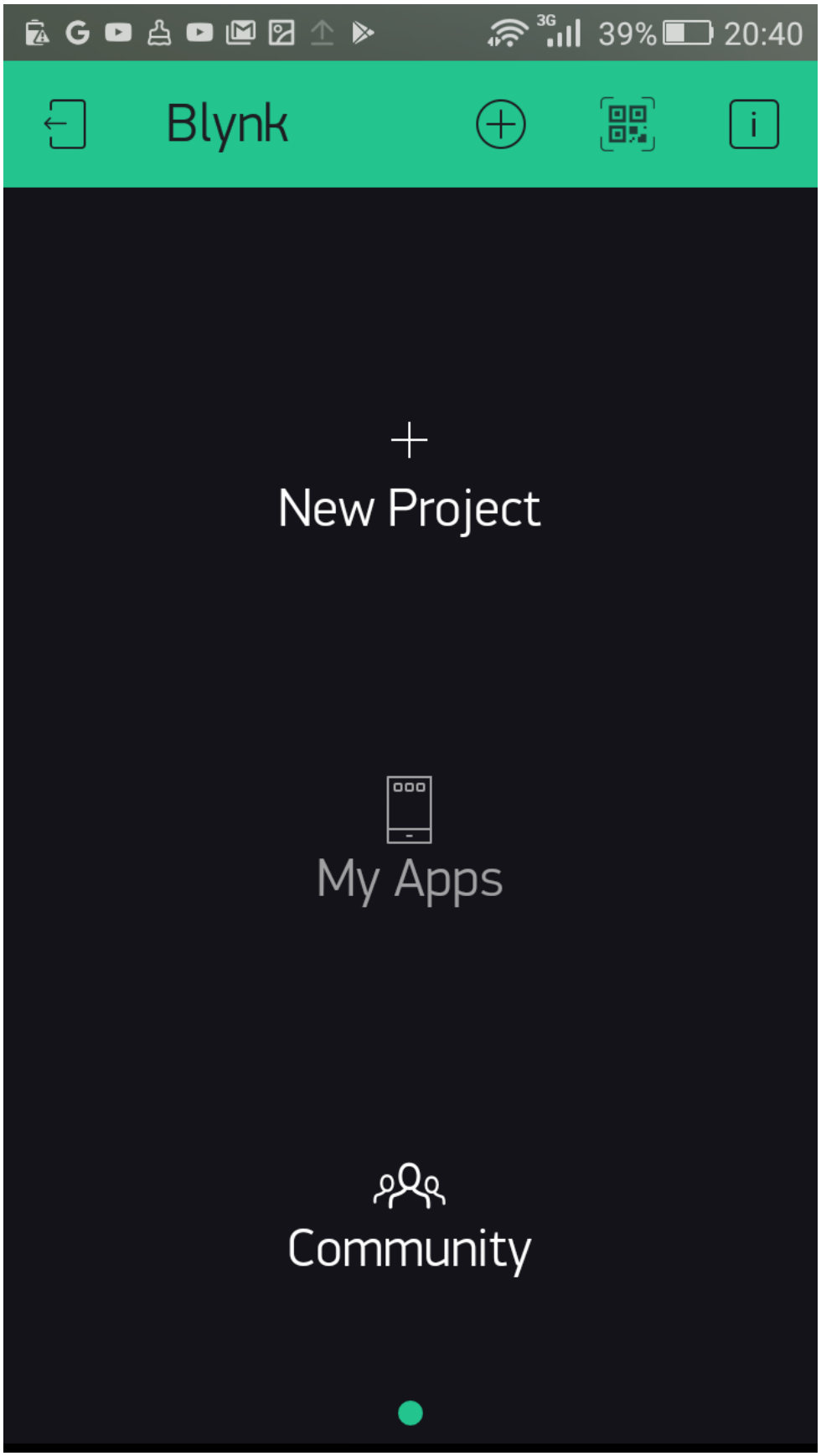

Blynk Administration
Pradeeka
Not secure
https://192.168.1.4:9443/admin#/config/list
Apps
Download digital pla
25 Feb - Google Driv
Touchy Subject
BBC micro:bit Python
A Breathtaking Piano
Blynk: How to install
Screen Recorder - Re
PictraMap Animator
Blynk Administration
Users
Stats
Realtime
Request per user
Messages
Board types
Login types
Widgets
Projects per user
Cells per project
Size of user profile
Webhook hosts
IPs
Hardware Info
Library versions
Configurations
Export
Name
twitter4j.properties
single_token_mail_body.txt
server.properties
mail.properties
gcm.properties
db.properties
1 - 6 on 6

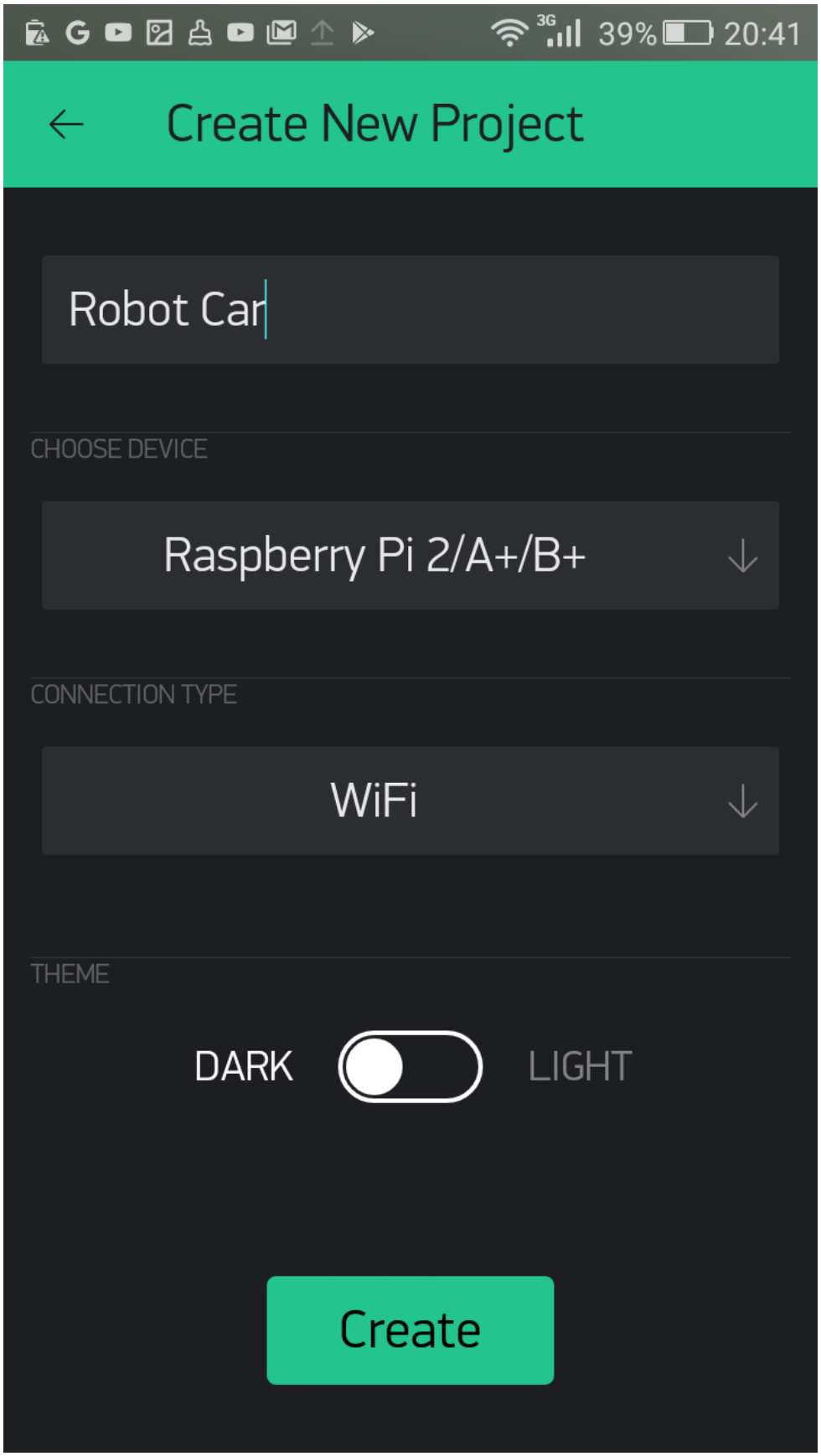

pi@raspberrypi: ~/blynk-library/linux
pi@raspberrypi:~/blynk-library/linux $ sudo ./blynk --token=e6d7cfa77b9e4dce9ca1
5bd7bfdf27e6
[0]
v0.5.0 on Linux
[2] Connecting to 192.168.1.5:8080
[25] Ready (ping: 21ms).

Chapter 8: Controlling a Robot with Blynk

```
pi@raspberrypi:~ $ gpio readall
 +-----+-----+---------+------+---+---Pi 3---+---+------+---------+-----+-----+
 | BCM | wPi |   Name  | Mode | V | Physical | V | Mode | Name    | wPi | BCM |
 +-----+-----+---------+------+---+----++----+---+------+---------+-----+-----+
 |     |     |    3.3v |      |   |  1 || 2  |   |      | 5v      |     |     |
 |   2 |   8 |   SDA.1 | ALT0 | 1 |  3 || 4  |   |      | 5V      |     |     |
 |   3 |   9 |   SCL.1 | ALT0 | 1 |  5 || 6  |   |      | 0v      |     |     |
 |   4 |   7 | GPIO. 7 |   IN | 0 |  7 || 8  | 1 | IN   | TxD     | 15  | 14  |
 |     |     |      0v |      |   |  9 || 10 | 1 | IN   | RxD     | 16  | 15  |
 |  17 |   0 | GPIO. 0 |   IN | 0 | 11 || 12 | 0 | IN   | GPIO. 1 | 1   | 18  |
 |  27 |   2 | GPIO. 2 |   IN | 0 | 13 || 14 |   |      | 0v      |     |     |
 |  22 |   3 | GPIO. 3 |   IN | 0 | 15 || 16 | 0 | IN   | GPIO. 4 | 4   | 23  |
 |     |     |    3.3v |      |   | 17 || 18 | 0 | IN   | GPIO. 5 | 5   | 24  |
 |  10 |  12 |    MOSI | ALT0 | 1 | 19 || 20 |   |      | 0v      |     |     |
 |   9 |  13 |    MISO | ALT0 | 1 | 21 || 22 | 0 | IN   | GPIO. 6 | 6   | 25  |
 |  11 |  14 |    SCLK | ALT0 | 0 | 23 || 24 | 1 | OUT  | CE0     | 10  | 8   |
 |     |     |      0v |      |   | 25 || 26 | 1 | OUT  | CE1     | 11  | 7   |
 |   0 |  30 |   SDA.0 |   IN | 1 | 27 || 28 | 1 | OUT  | SCL.0   | 31  | 1   |
 |   5 |  21 | GPIO.21 |   IN | 0 | 29 || 30 |   |      | 0v      |     |     |
 |   6 |  22 | GPIO.22 |   IN | 0 | 31 || 32 | 0 | IN   | GPIO.26 | 26  | 12  |
 |  13 |  23 | GPIO.23 |   IN | 1 | 33 || 34 |   |      | 0v      |     |     |
 |  19 |  24 | GPIO.24 |   IN | 0 | 35 || 36 | 0 | IN   | GPIO.27 | 27  | 16  |
 |  26 |  25 | GPIO.25 |   IN | 0 | 37 || 38 | 0 | IN   | GPIO.28 | 28  | 20  |
 |     |     |      0v |      |   | 39 || 40 | 0 | IN   | GPIO.29 | 29  | 21  |
 +-----+-----+---------+------+---+----++----+---+------+---------+-----+-----+
 | BCM | wPi |   Name  | Mode | V | Physical | V | Mode | Name    | wPi | BCM |
 +-----+-----+---------+------+---+---Pi 3---+---+------+---------+-----+-----+
```




39%
20:40
Blynk
New Project
My Apps
Community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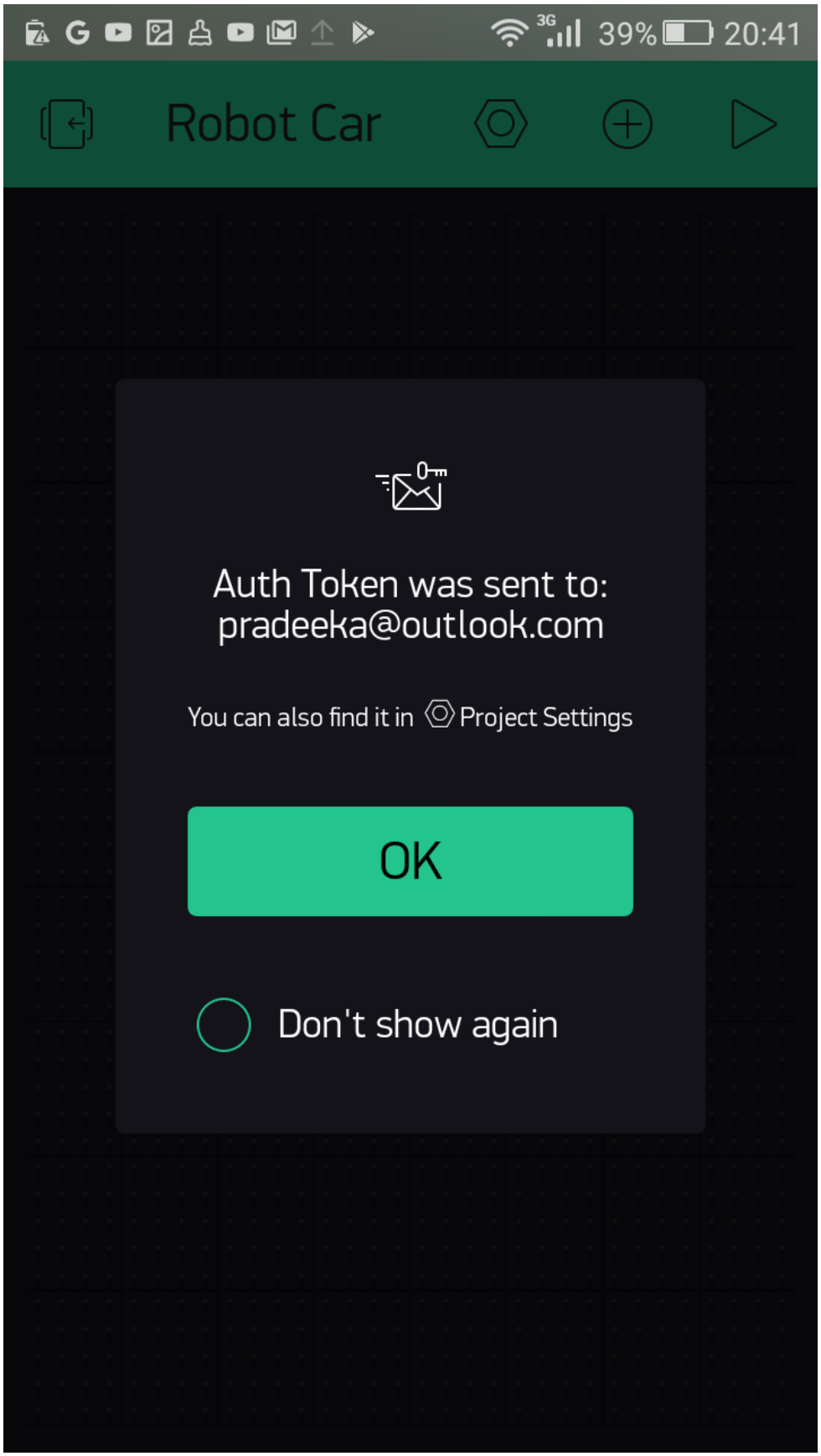
Create New Project
Robot Car
CHOOSE DEVICE
Raspberry Pi 2/A+/B+
CONNECTION TYPE
WiFi
THEME
DARK
LIGHT
Create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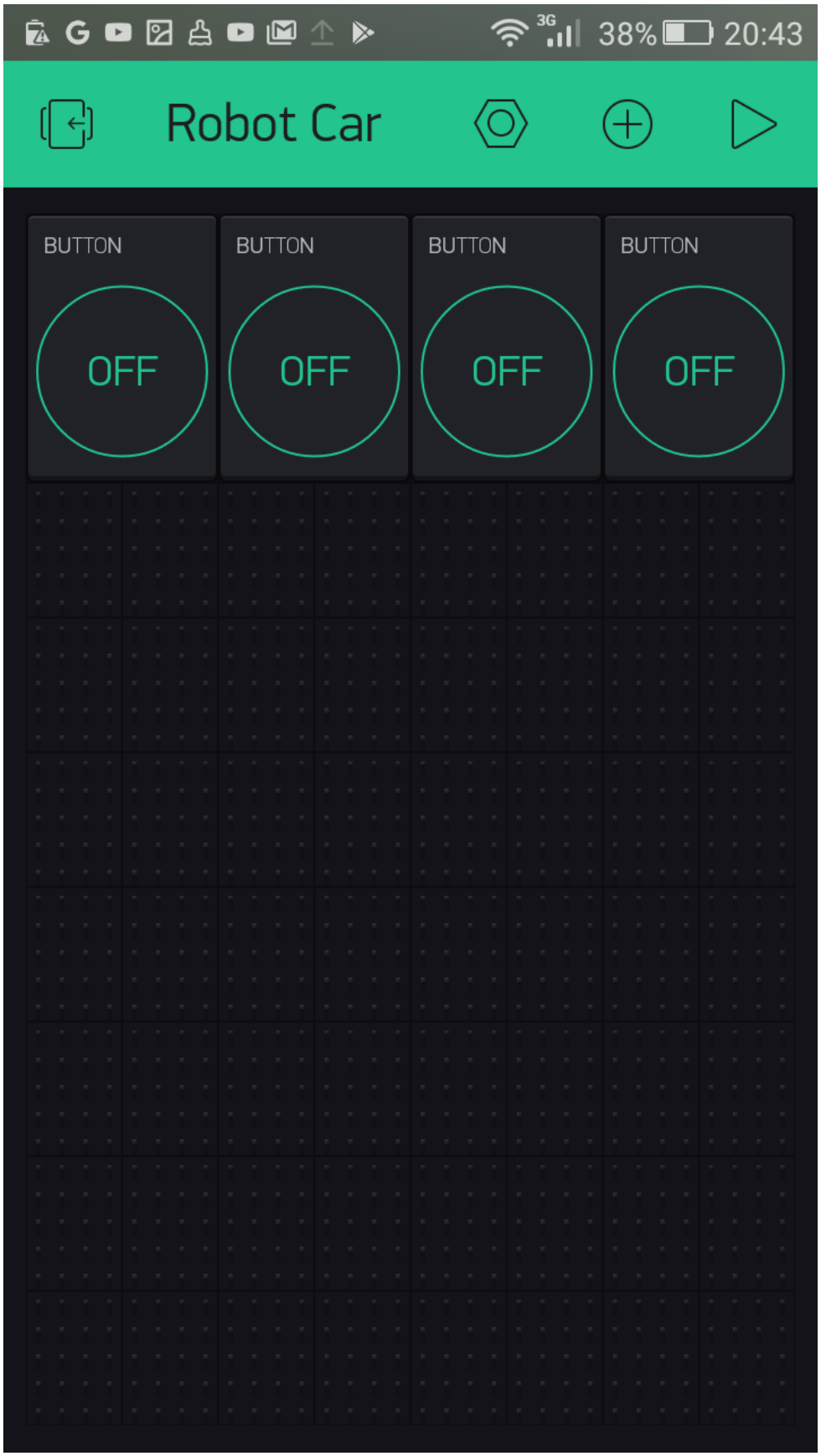
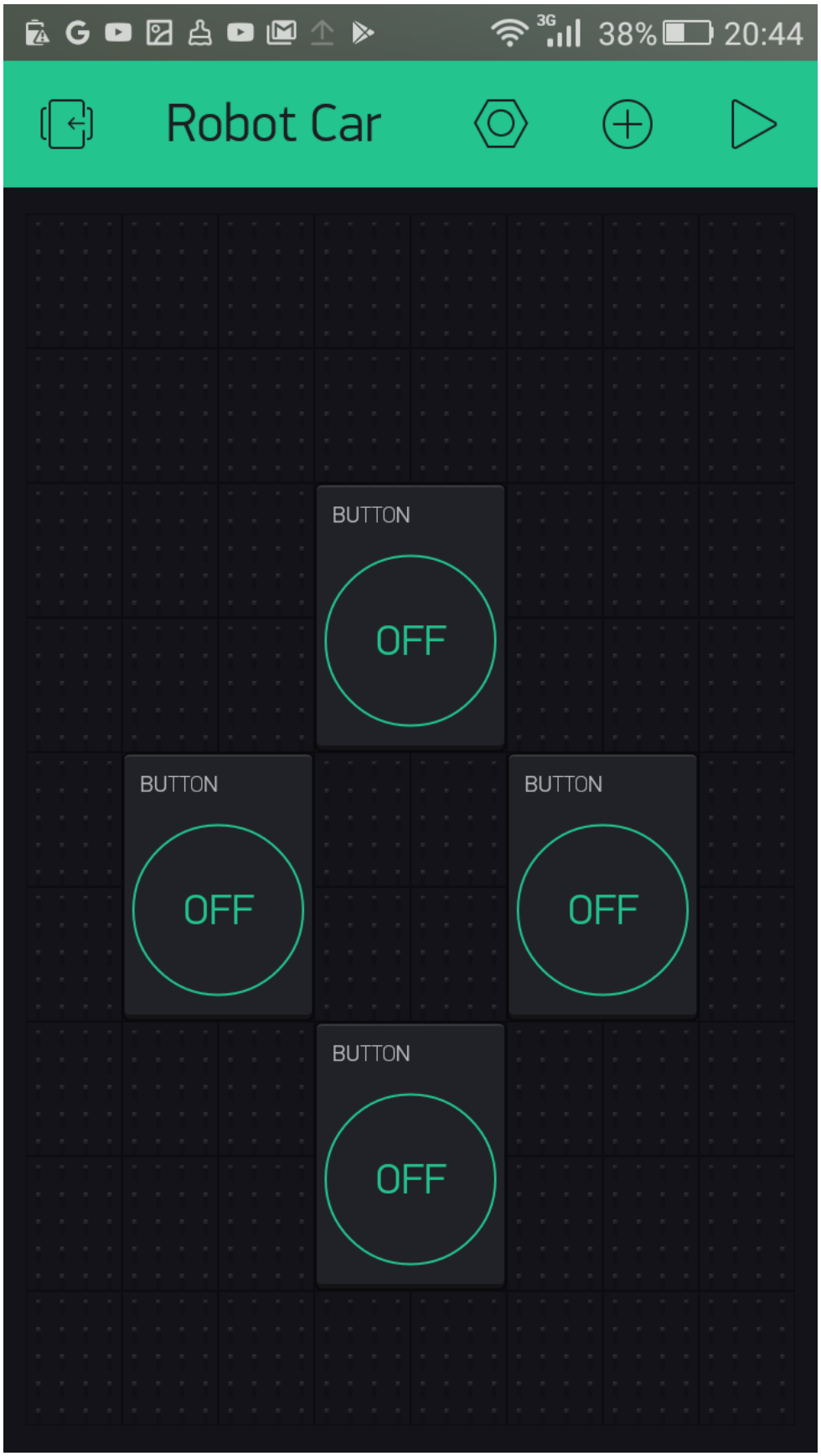
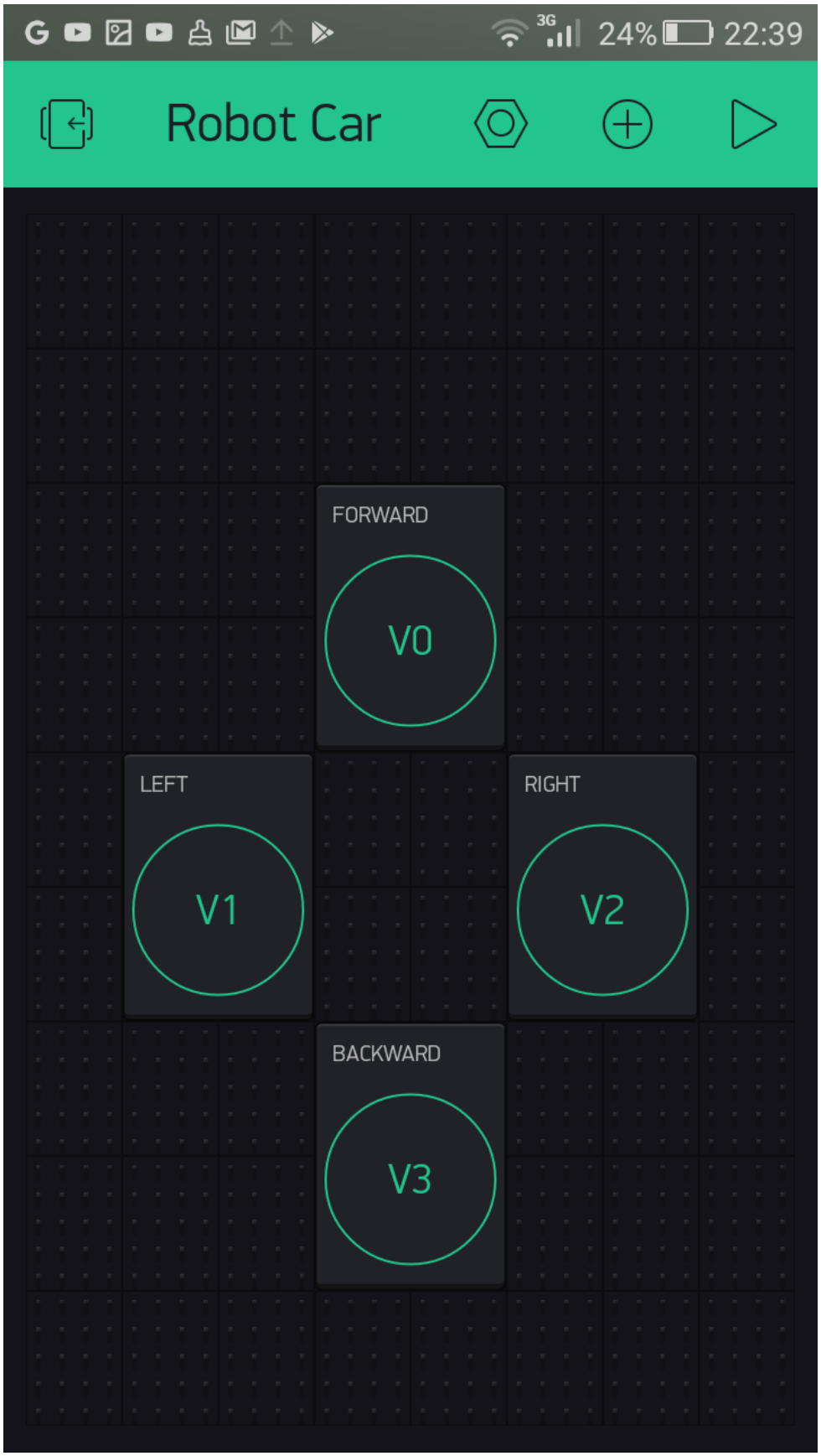
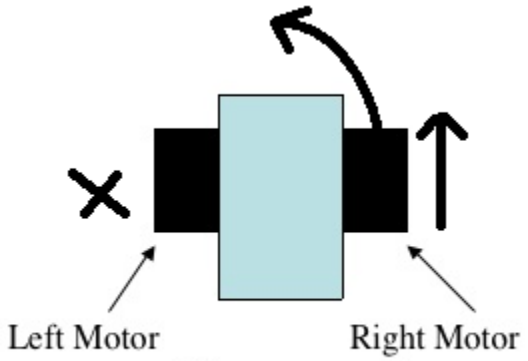
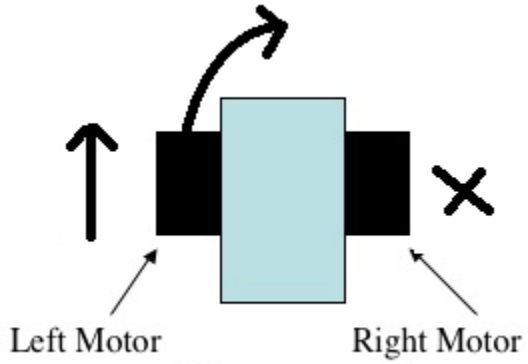
20:41
Robot Car
Auth Token was sent to:
pradeeka@outlook.com
You can also find it in
Project Settings
OK
Don't show again

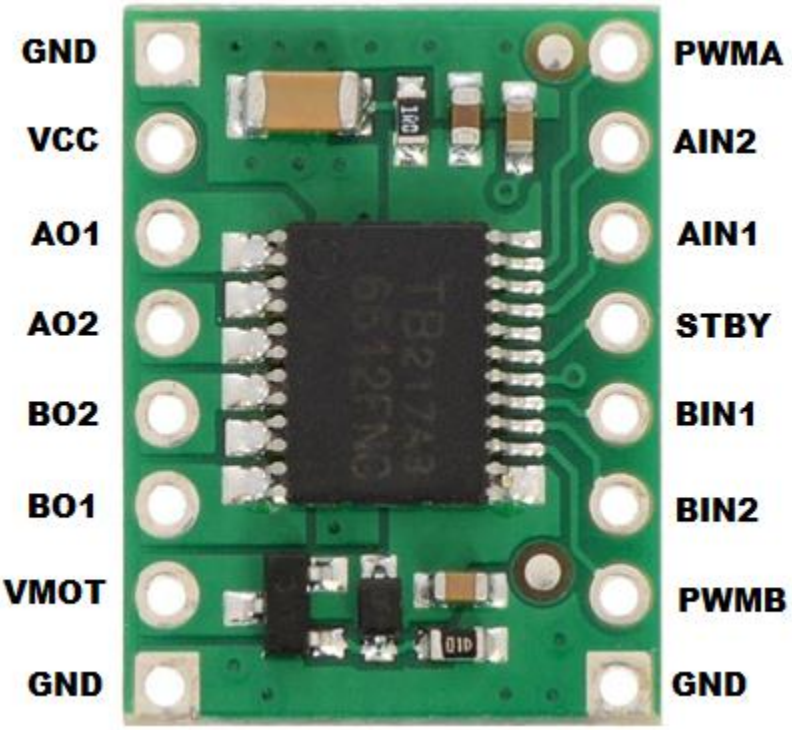

38%
20:43
Robot Car
BUTTON
OFF
BUTTON
OFF
BUTTON
OFF
BUTTON
OFF

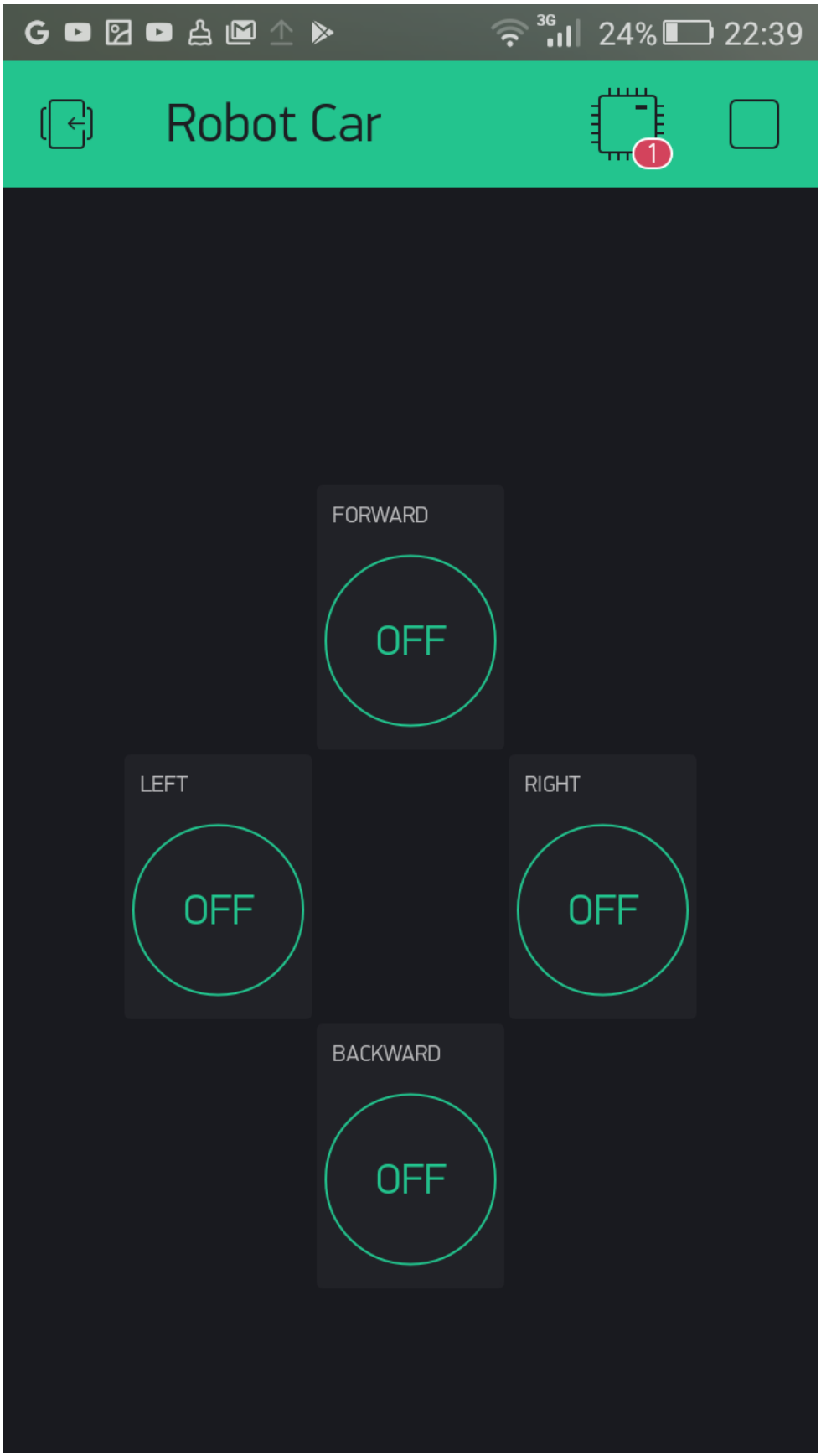

38%
20:44
Robot Car
BUTTON
OFF
BUTTON
OFF
BUTTON
OFF
BUTTON
OFF


24%
22:39
Robot Car
FORWARD
V0
LEFT
V1
RIGHT
V2
BACKWARD
V3


Left Motor
Right Motor


Left Motor
Right Motor


GND
VCC
AO1
AO2
BO2
BO1
VMOT
GND
PWMA
AIN2
AIN1
STBY
BIN1
BIN2
PWMB
GND


24%
22:39
Robot Car
1
FORWARD
OFF
LEFT
OFF
RIGHT
OFF
BACKWARD
OFF