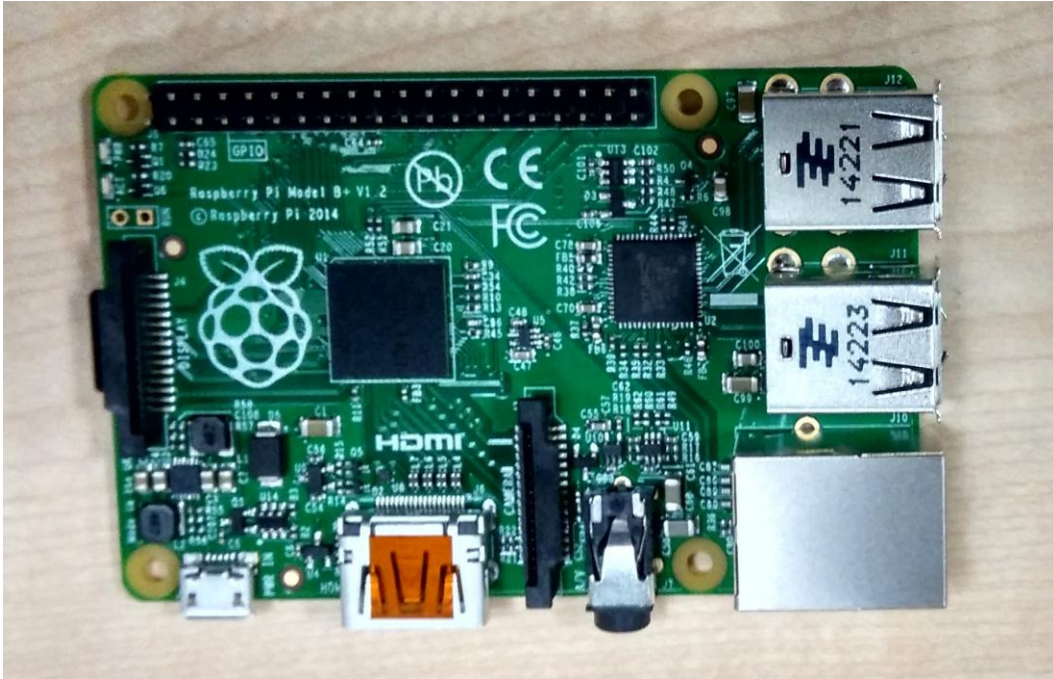
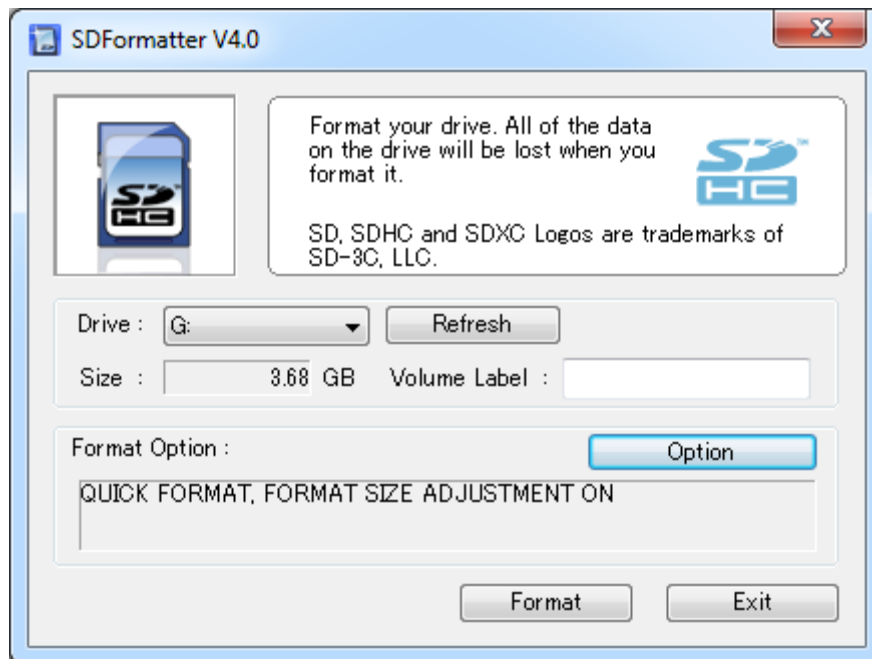


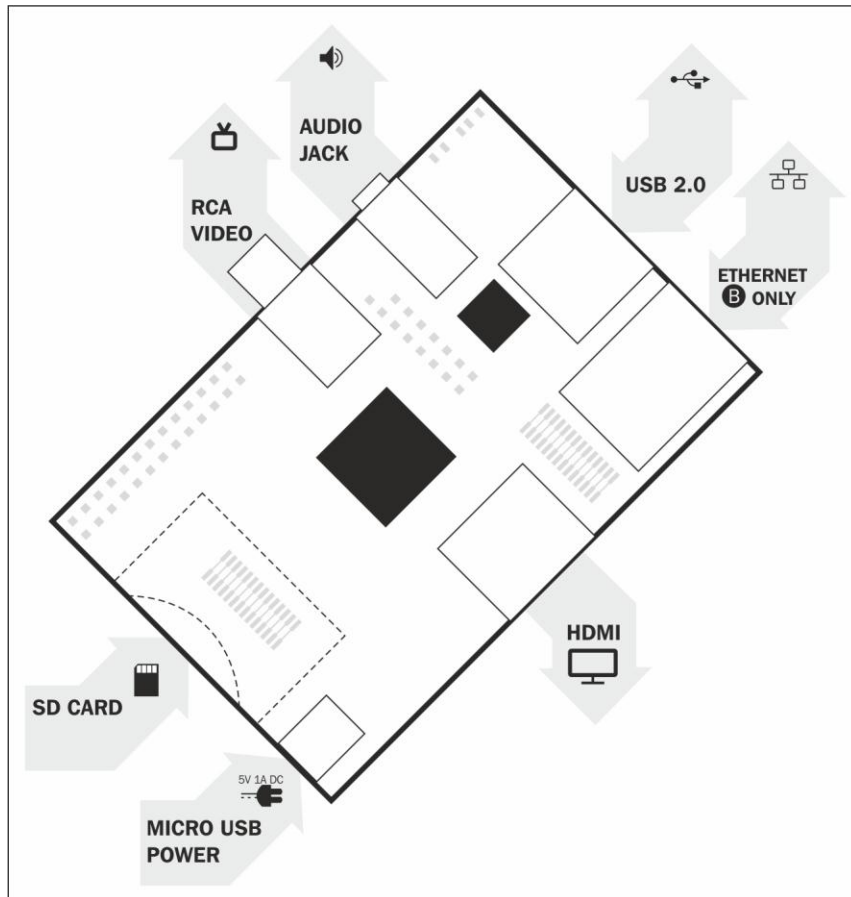
Chapter 1: Getting Started with Raspberry Pi











Raspbian is a free operating system based on **Linux** and optimised for the **Raspberry Pi**.



An **operating system** is the set of basic programs and utilities that make your Raspberry Pi run.

Raspbian: Extracting filesystem



1625 MB of 1639 MB written (1.9 MB/sec)

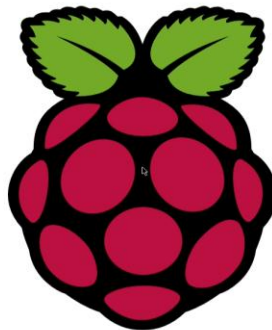
Raspberry Pi Software Configuration Tool (raspi-config)

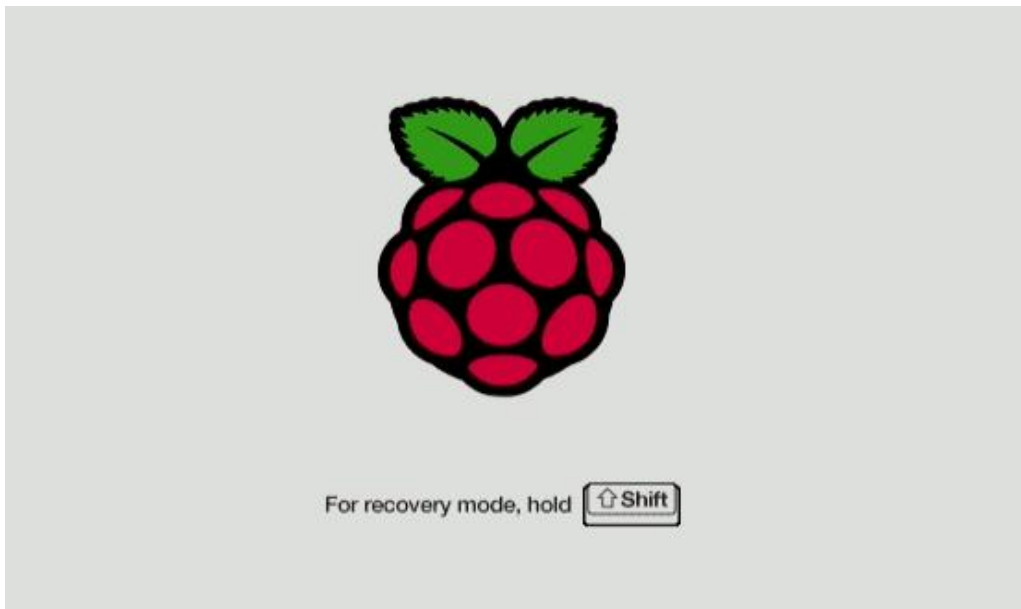
Setup Options

1 Expand Filesystem	Ensures that all of the SD card storage is available to the OS
2 Change User Password	Change password for the default user (pi)
3 Enable Boot to Desktop/Scratch	Choose whether to boot into a desktop environment, Scratch, or the command-line
4 Internationalisation Options	Set up language and regional settings to match your location
5 Enable Camera	Enable this Pi to work with the Raspberry Pi Camera
6 Add to Rastrack	Add this Pi to the online Raspberry Pi Map (Rastrack)
7 Overclock	Configure overclocking for your Pi
8 Advanced Options	Configure advanced settings
9 About raspi-config	Information about this configuration tool

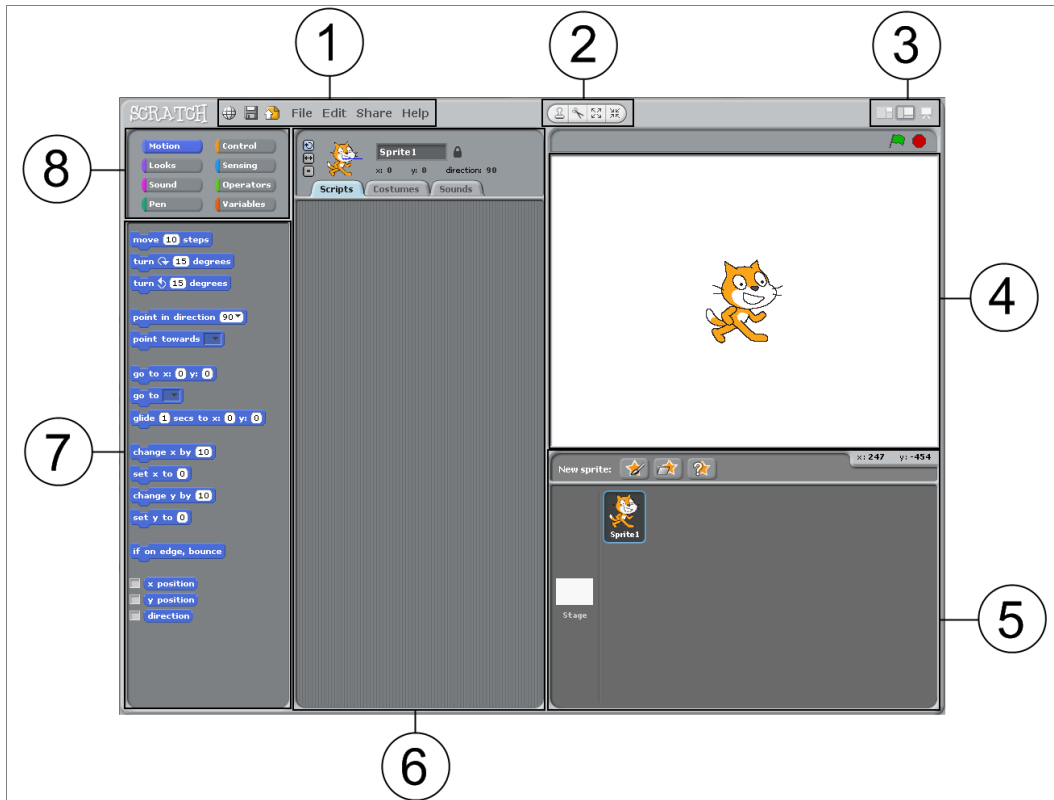
<Select> <Finish>

- OCR Resources
- Midori
- Python Games
- Debian Reference
- Scratch
- Shutdown
- LXTerminal
- PI Store
- WiFi Config
- ICLÉ 3
- ICLÉ

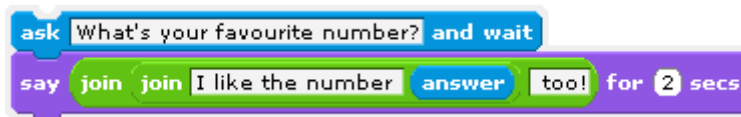
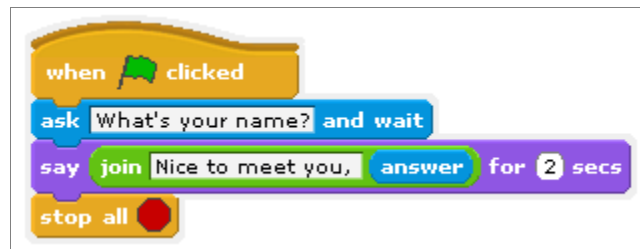
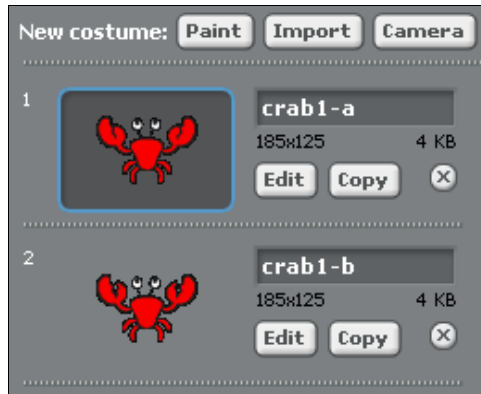


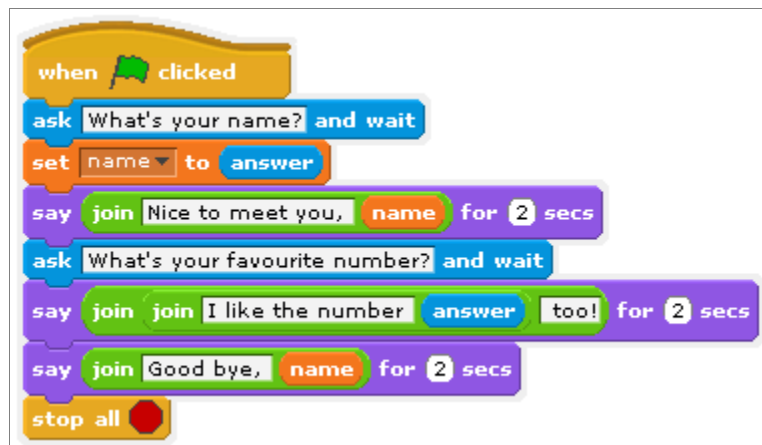


Chapter 2: Animating with Scratch









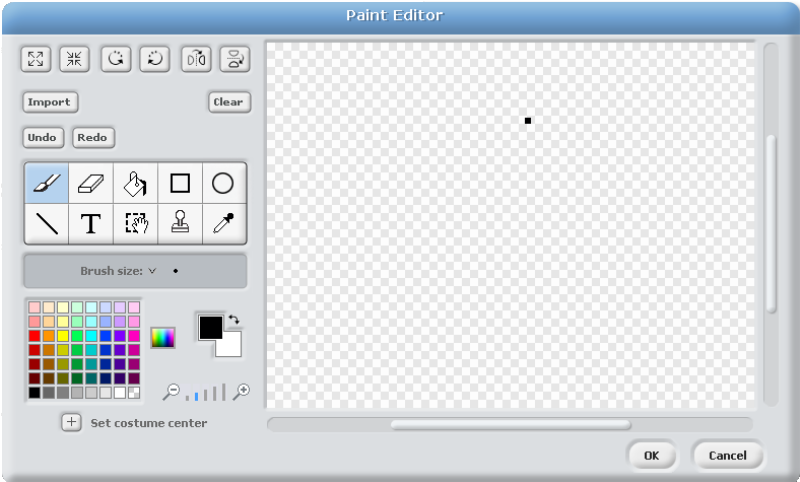
```
when clicked
ask What's your name? and wait
set name to answer
say join Nice to meet you, name for 2 secs
ask What's your favourite number? and wait
say join join I like the number answer too! for 2 secs
repeat answer
  glide 0.1 secs to x: x position y: y position + 50
  repeat 24
    turn 15 degrees
  glide 0.1 secs to x: x position y: y position - 50
say join Good bye, name for 2 secs
stop all
```

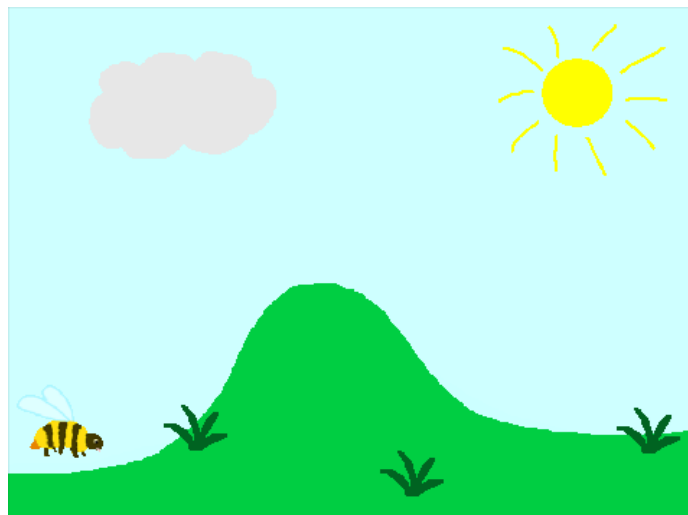
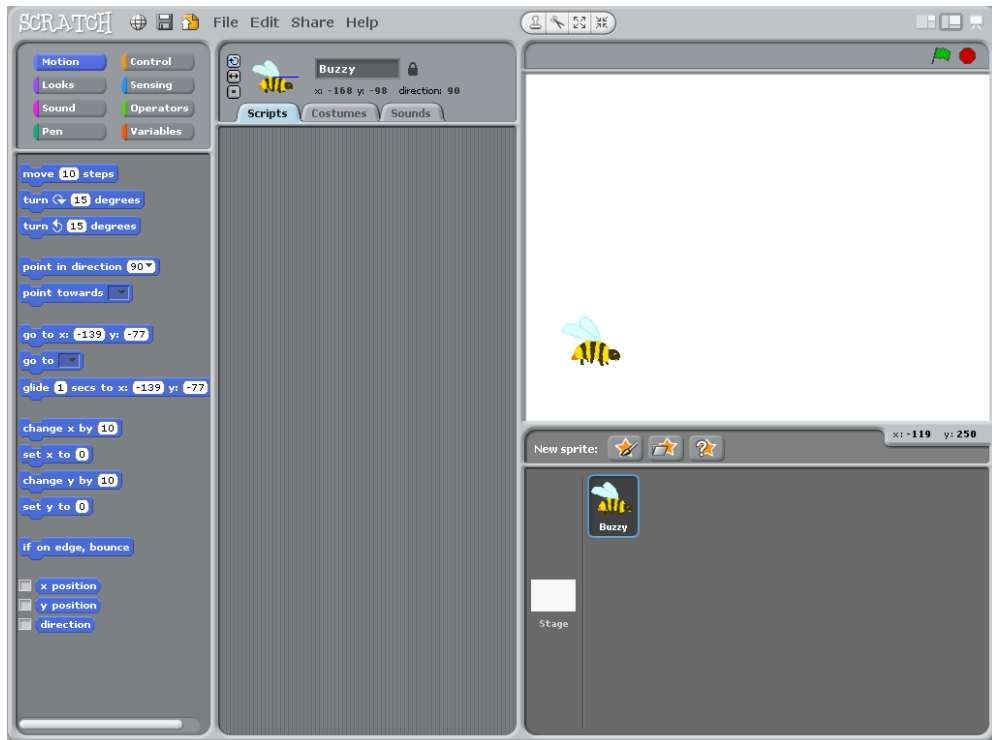
```
set flips to 0
repeat answer
  glide 0.1 secs to x: x position y: y position + 50
  repeat 24
    turn 15 degrees
  glide 0.1 secs to x: x position y: y position - 50
  change flips by 1
  think flips for 1 secs
```

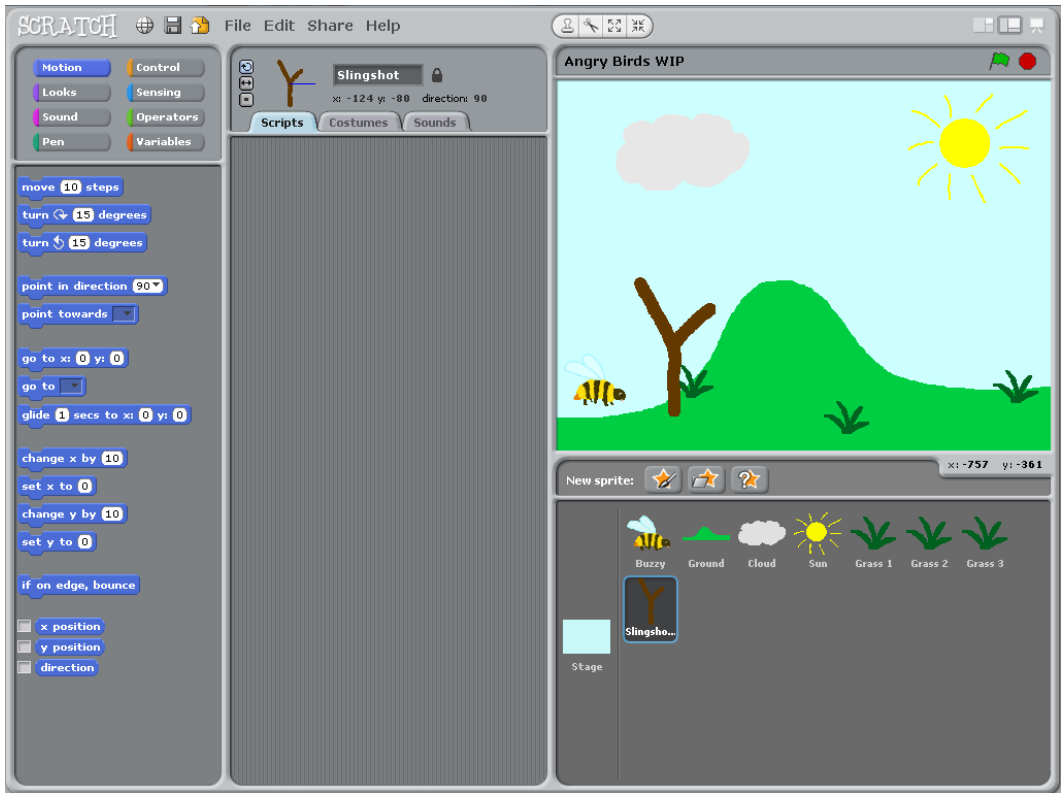
```
if flips > 5
  say Wow, I'm dizzy now! for 2 secs
else
  say Easy! for 2 secs
```

```
when clicked
ask What's your name? and wait
set name to answer
say join Nice to meet you, name for 2 secs
ask What's your favourite number? and wait
say join join I like the number answer too! for 2 secs
set flips to 0
repeat answer
  glide 0.1 secs to x: x position y: y position + 50
  repeat 24
    turn 15 degrees
  glide 0.1 secs to x: x position y: y position - 50
  change flips by 1
  think flips for 1 secs
if flips > 5
  say Wow, I'm dizzy now! for 2 secs
else
  say Easy! for 2 secs
say join Good bye, name for 2 secs
stop all
```

Chapter 3: Making Your Own Angry Birds Game







```
when green flag clicked
  go to Slingshot
```

```
key space pressed?
```

```
if key left arrow pressed?
  change x by -5
```



```
when clicked
go to Slingshot
forever
if key left arrow pressed?
change x by -5
if key right arrow pressed?
change x by 5
if key up arrow pressed?
change y by 5
if key down arrow pressed?
change y by -5
```

```
if key space pressed?
broadcast launch
stop script
```

```
when I receive launch
set x speed to (x position of Slingshot - x position) / 20
set y speed to (y position of Slingshot - y position) / 20
forever
change x by x speed
change y by y speed
```

```
change y speed by -0.05
```

```
if <x position < -240 or x position > 240>
  set x speed to -1 * x speed
if <y position < -180 or y position > 180>
  set y speed to -1 * y speed
```

```
if touching Ground ?
  stop script
```

```
when I receive launch
  set x speed to (x position of Slingshot - x position) / 20
  set y speed to (y position of Slingshot - y position) / 20
  forever
    change x by x speed
    change y by y speed
    change y speed by -0.05
    if <x position < -240 or x position > 240>
      set x speed to -1 * x speed
    if <y position < -180 or y position > 180>
      set y speed to -1 * y speed
    if touching Ground ?
      stop script
```

```
when I receive launch
  forever if touching Buzzy ?
```

```
when I receive launch
forever if touching Buzzy ?
hide
change score by 10
stop script
```

```
when clicked
show
set score to 0
```

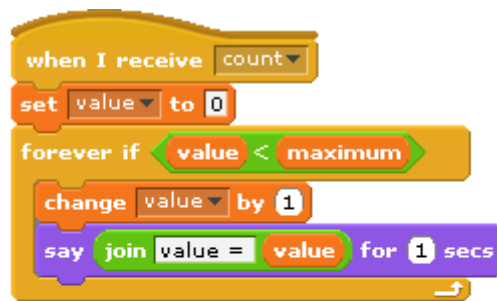


```
when I receive slow down
set x speed to x speed / 2
set y speed to y speed / 2
```

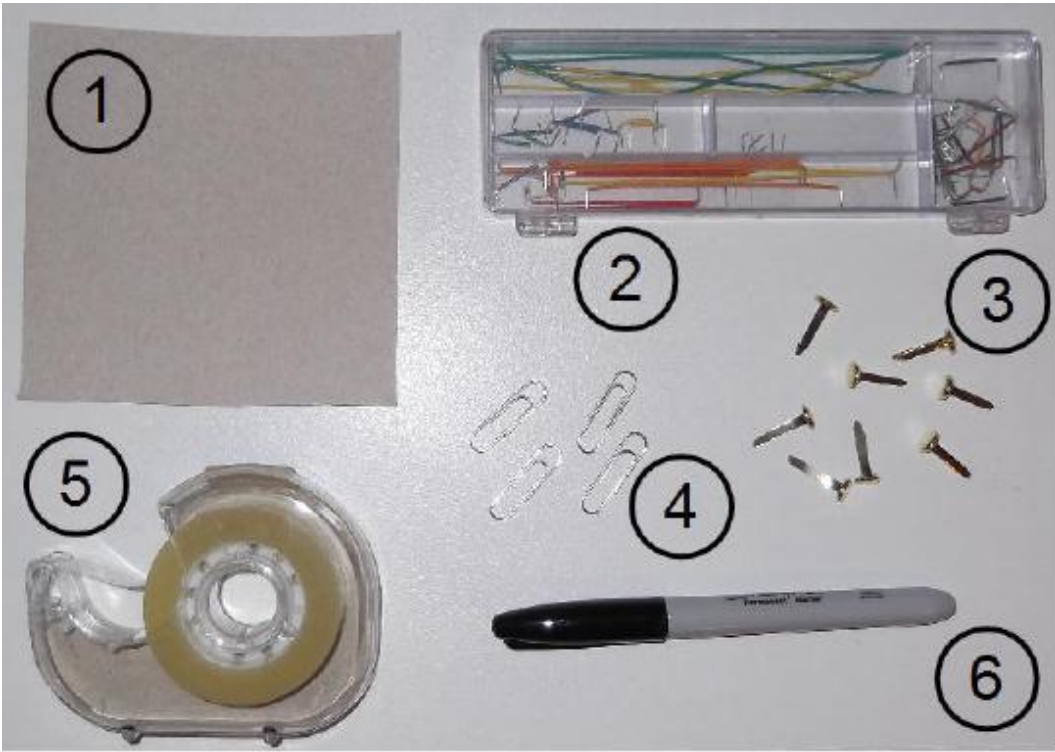
```
when I receive dive bomb
set y speed to x speed / -2
```

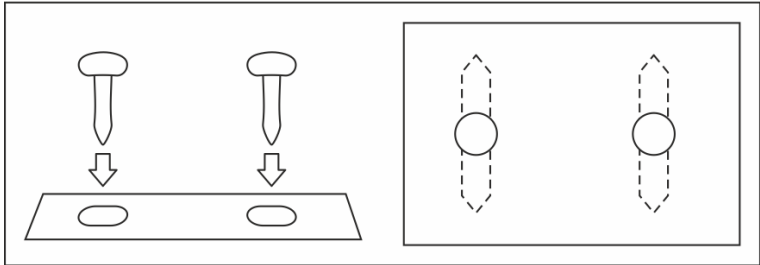
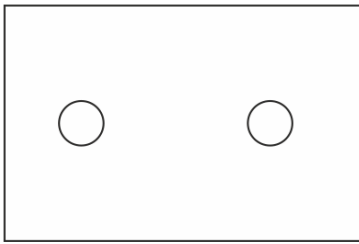
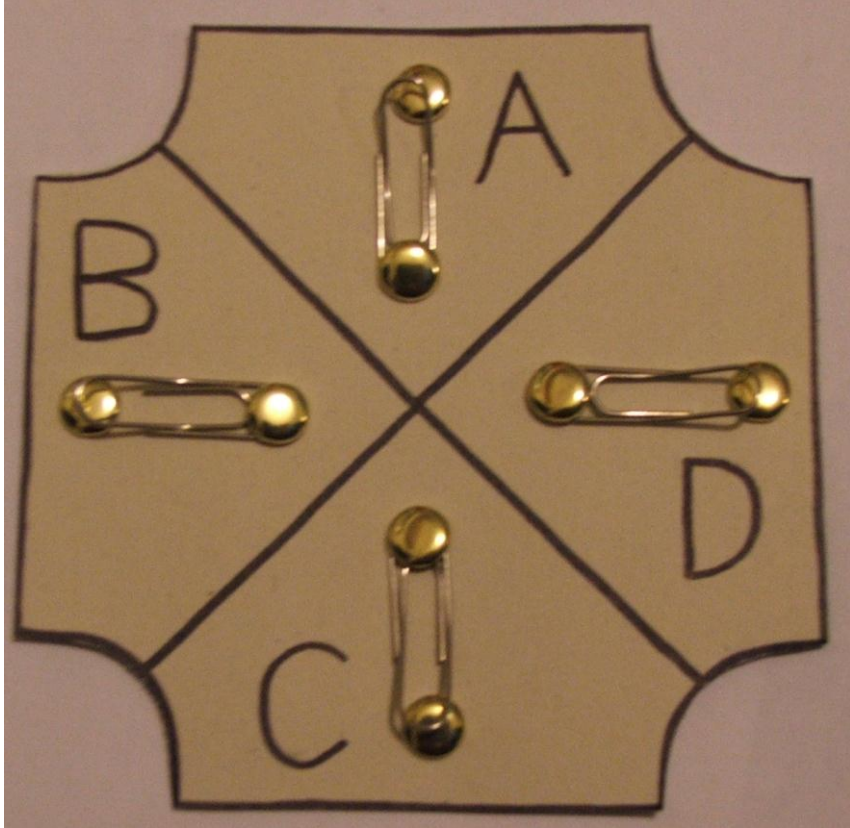
```
when I receive invert
set gravity to -1 * gravity
```

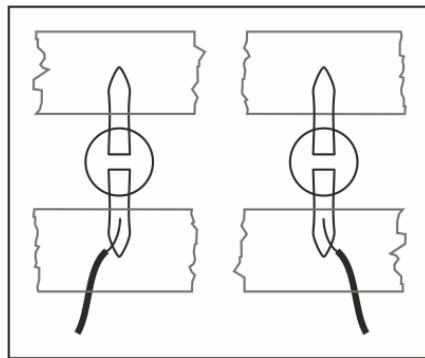
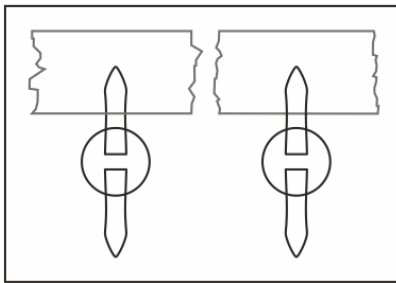
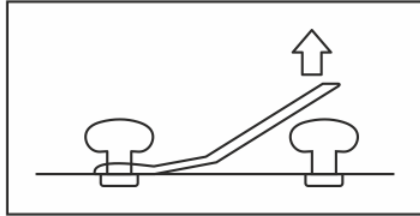
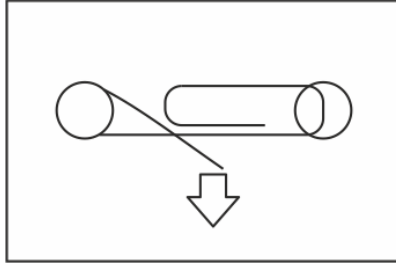
Chapter 4: Creating Random Insults

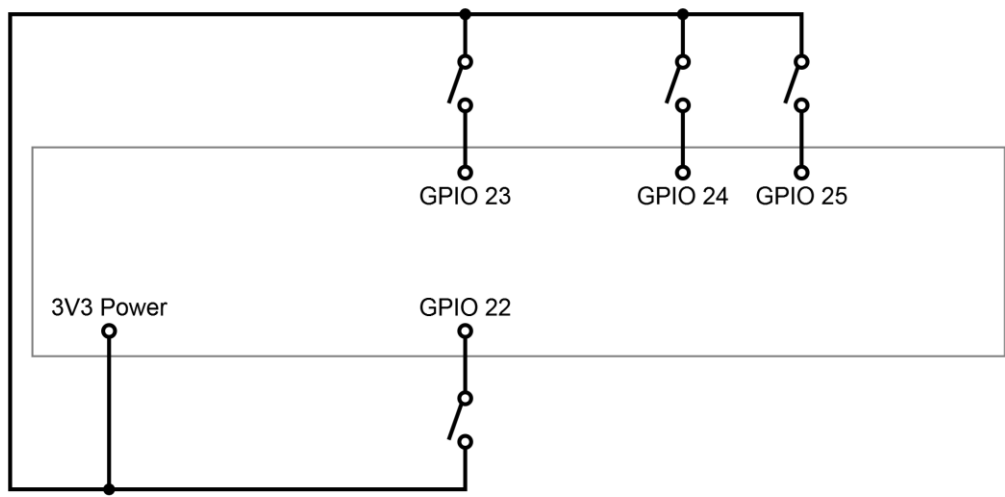
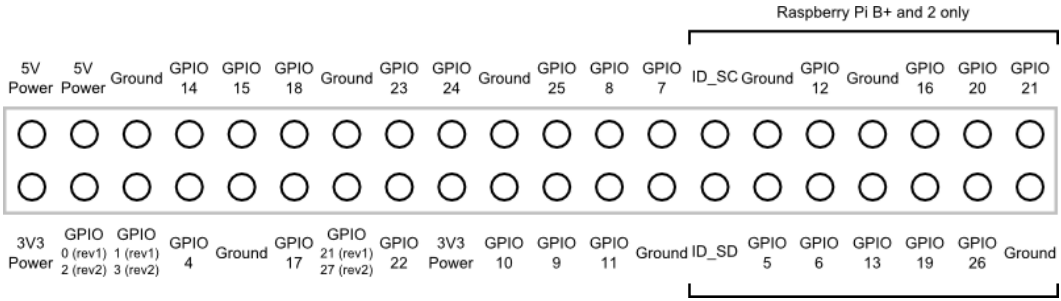


Chapter 5: Testing Your Speed

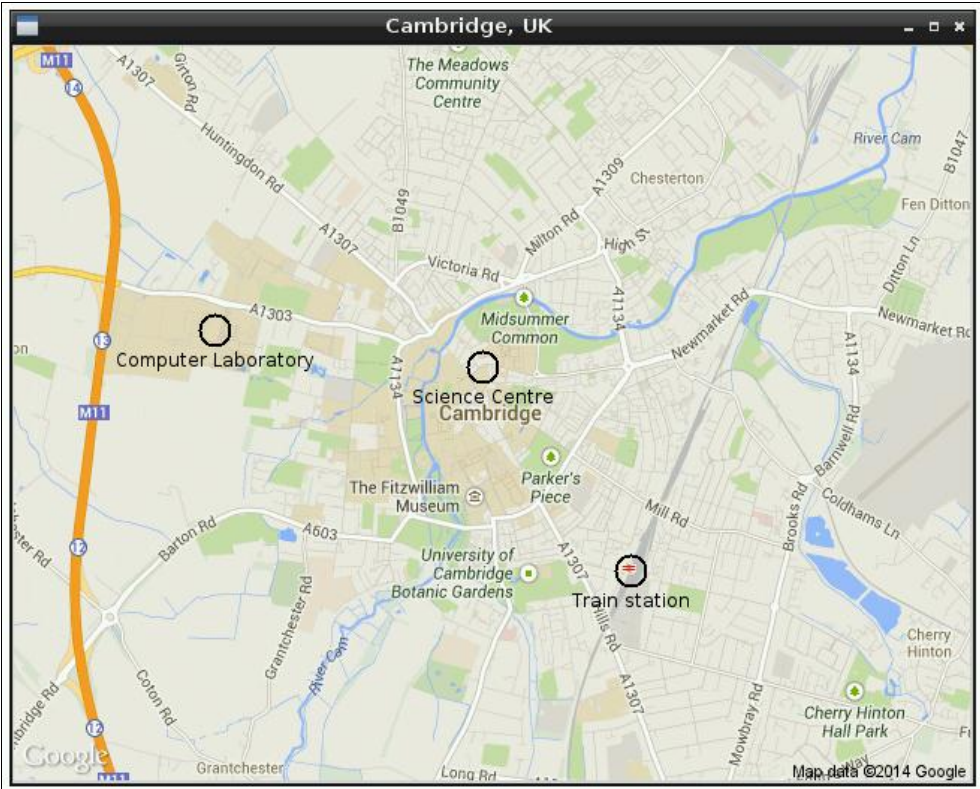


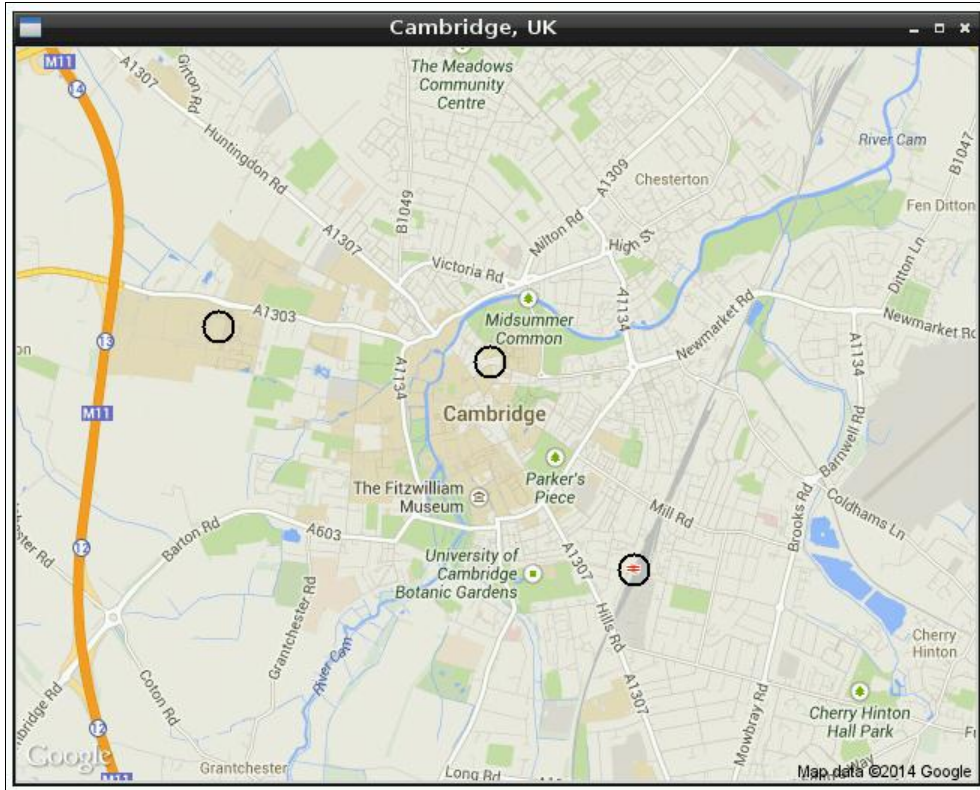
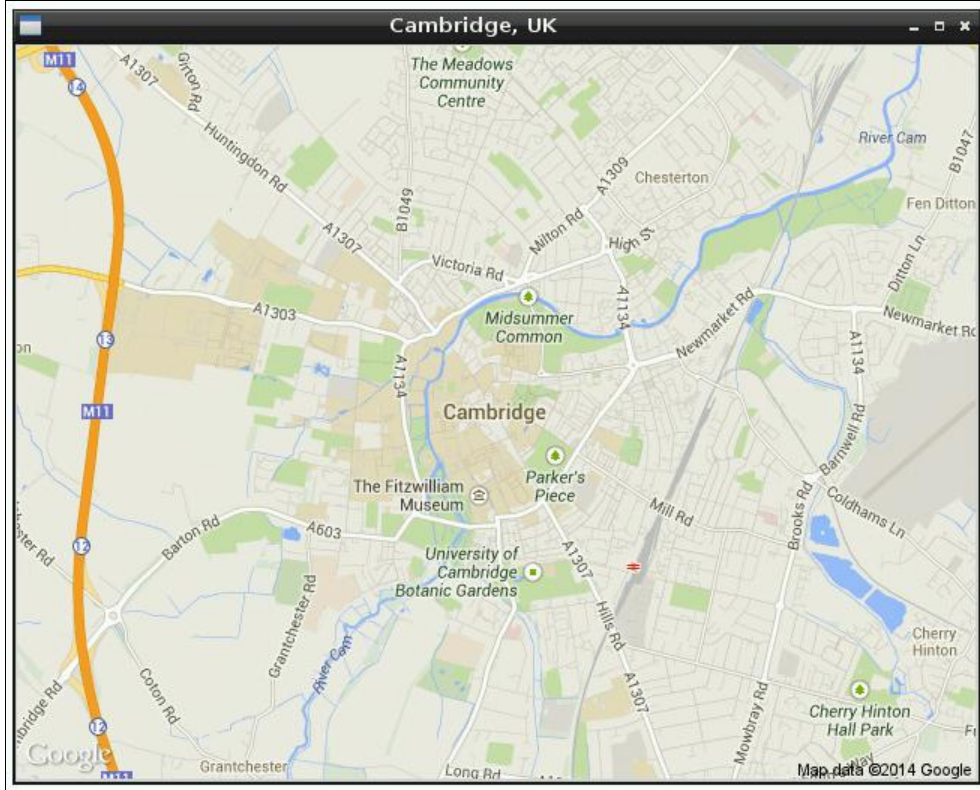






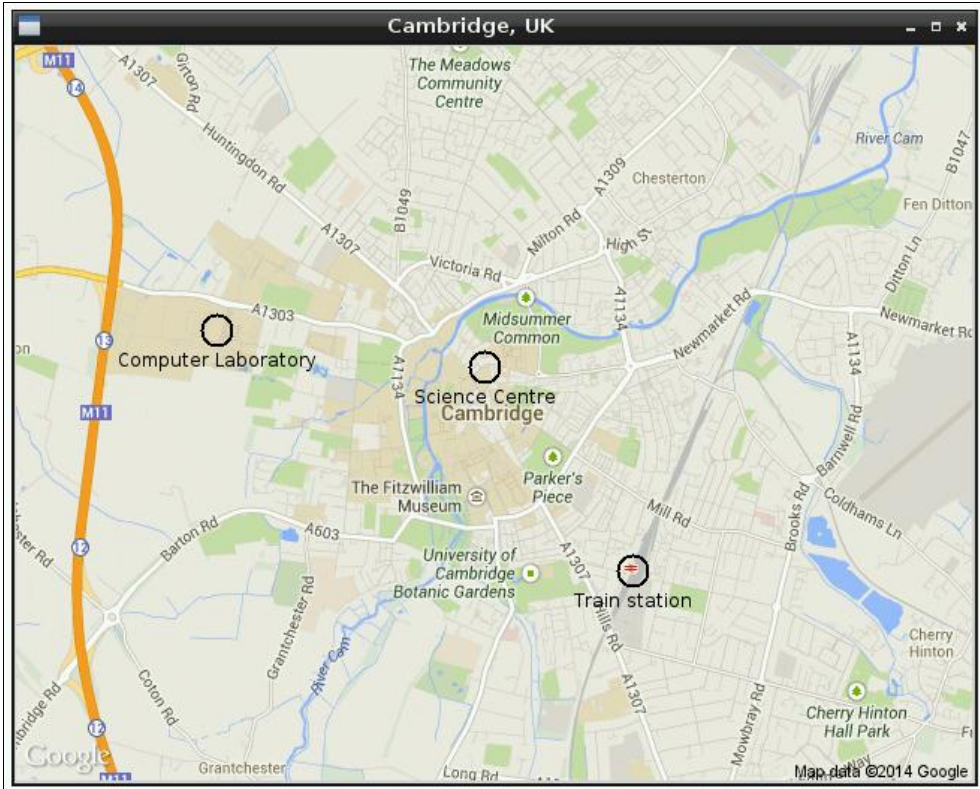
Chapter 6: Making an Interactive Map of your City





New marker - □ ×

Please enter a label for your marker



Chapter 7: Building Beats with Sonic Pi

