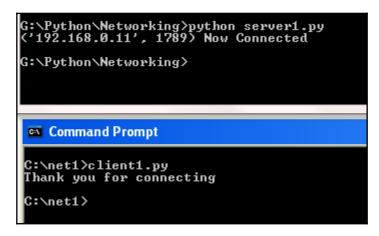
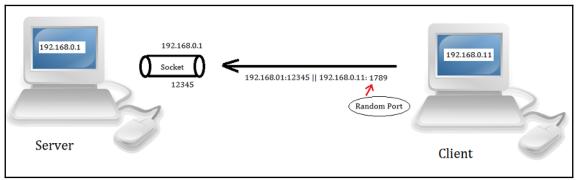
# Chapter 1: Python with Penetration Testing and Networking

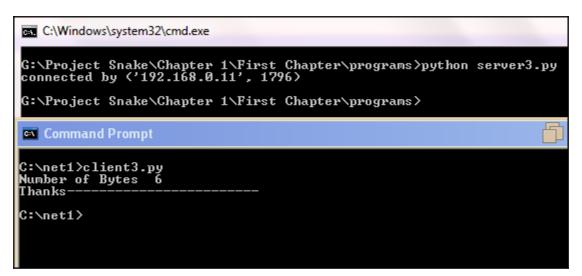




```
G:\Python\Networking\python server2.py
('192.168.0.11', 1791) Now Connected
('192.168.0.11', 1792) Now Connected
('192.168.0.11', 1793) Now Connected

C:\net1\client1.py
Thank you for connecting

C:\net1\client1.py
Thank you for connecting
```



```
G:\Project Snake\Chapter 1\First Chapter\programs\python udp1.py
recevied from ('192.168.0.11', 1814)
obtained hello all
G:\Project Snake\Chapter 1\First Chapter\programs>

C:\Command Prompt

C:\net1\python udp2.py
9

C:\net1>
```

```
G:\Project Snake\Chapter 1\First Chapter\programs>python udptime1.py
Traceback (most recent call last):
   File "udptime1.py", line 7, in <module>
        data, addr = s.recvfrom(1024)
socket.timeout: timed out

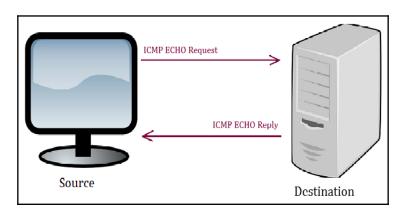
G:\Project Snake\Chapter 1\First Chapter\programs>
```

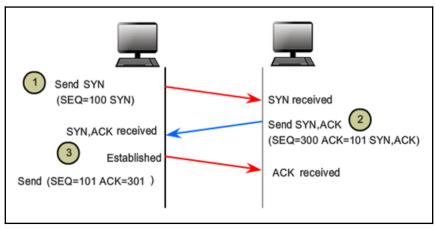
```
G:\Project Snake\Chapter 1\First Chapter\programs>python udptime2.py
Client not connected
G:\Project Snake\Chapter 1\First Chapter\programs>
```

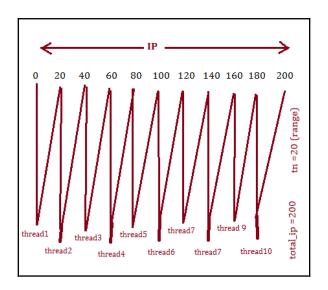
```
G:\Project Snake\Chapter 1\First Chapter\programs>python connect_ex.py
22 : 10061
23 : 10061
80 : 0
912 : 0
135 : 0
445 : 0
20 : 10061
G:\Project Snake\Chapter 1\First Chapter\programs>
```

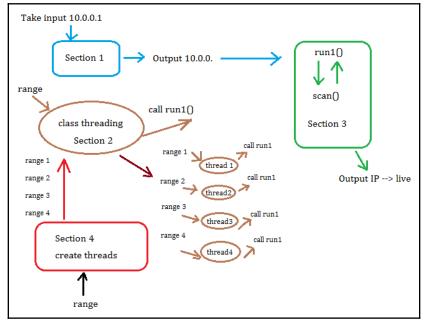
```
G:\Project Snake\Chapter 1\First Chapter\programs>python getadd1.py
Family : AF_INET
Type : SOCK_STREAM
Protocol : IPPROTO_IP
Canonical name:
Socket address: ('14.139.242.100', 80)
Family : AF_INET
Type : SOCK_STREAM
Protocol : IPPROTO_IP
Canonical name:
Socket address: ('220.227.15.47', 80)
G:\Project Snake\Chapter 1\First Chapter\programs>
```

#### **Chapter 2: Scanning Pentesting**





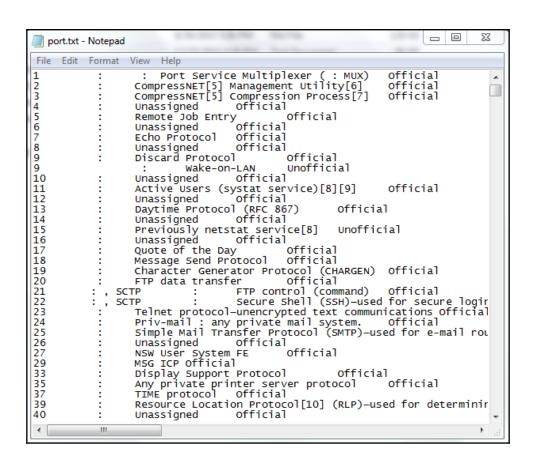




```
root@Mohit|Raj: /2nd_edition/network_scanning
File Edit View Search Terminal Help
root@Mohit|Raj:/2nd_edition/network_scanning#
root@Mohit|Raj:/2nd_edition/network_scanning# python ping_sweep_send_rec.py
Enter the Network Address 192.168.0.0
Enter the Starting Number 1
Enter the Last Number 254
S.no
001 192.168.0.1
002 192 1
        IP
    192.168.0.2
021
      192.168.0.21
     192.168.0.22
022
024 192.168.0.24
Time taken 0:00:11.217894
root@Mohit|Raj:/2nd_edition/network_scanning#
```

```
C:\Windows\System32\cmd.exe
K:\Book projects\Project Snake 2nd\Chapter2 scanning>python OS detection.py 192.168.0.3
Open ports Description
22 --- --> ssh
53 --- --> domain
80 --- --> http
111 --- --> rpcbind
443 --- --> https
         --> mysql
3306 ---
8443 ---
              --> https-alt
-----OS detail-----
Details about the scanned host are:
                                      ['cpe:/o:linux:linux_kernel:2.6']
Operating system family is:
                                      Linux
Type of OS is:
                                      general purpose
Generation of Operating System :
                                      2.6.X
Operating System Vendor is:
                                      Linux
Accuracy of detection is:
                                      100
K:\Book projects\Project Snake 2nd\Chapter2 scanning>python OS detection.py 192.168.0.129
Open ports Description
22 --- --> ssh
80 --- --> http
                                                     2
-----OS detail-----
Details about the scanned host are:
                                      ['cpe:/o:linux:linux kernel:3']
Operating system family is:
                                      Linux
Type of OS is:
                                      general purpose
Generation of Operating System :
Operating System Vendor is:
                                      Linux
Accuracy of detection is:
                                      100
K:\Book projects\Project Snake 2nd\Chapter2 scanning>
```

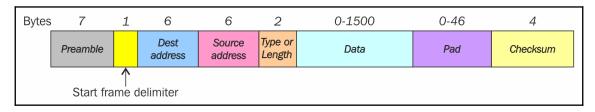
```
C:\Windows\System32\cmd.exe
K:\Book_projects\Project Snake 2nd\Chapter2_scanning>python OS_detection.py 192.168.0.130
Open ports Description
135 --- --> msrpc
139 --- --> netbios-ssn
445 --- --> microsoft-ds
 -----OS detail-----
Details about the scanned host are:
                                      ['cpe:/o:microsoft:windows_xp::sp2', 'cpe:/o:micro
soft:windows_xp::sp3']
Operating system family is:
                                      Windows
Type of OS is:
                                       general purpose
Generation of Operating System :
                                       XP
Operating System Vendor is:
                                      Microsoft
Accuracy of detection is:
                                       100
K:\Book_projects\Project Snake 2nd\Chapter2_scanning>python OS_detection.py 192.168.0.1
Open ports Description
135 --- --> msrpc
139 --- --> netbios-ssn
445 --- --> microsoft-ds
902 --- --> iss-realsecure
912 --- --> apex-mesh
5357 ---
            --> wsdapi
-----OS detail-----
Details about the scanned host are:
                                       ['cpe:/o:microsoft:windows_10']
Operating system family is:
                                      Windows
Type of OS is:
                                       general purpose
Generation of Operating System :
                                       10
Operating System Vendor is:
                                       Microsoft
Accuracy of detection is:
                                       100
K:\Book_projects\Project Snake 2nd\Chapter2_scanning>
```

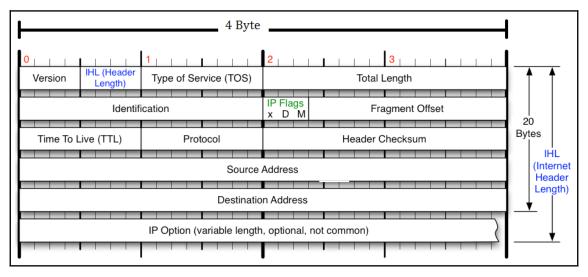


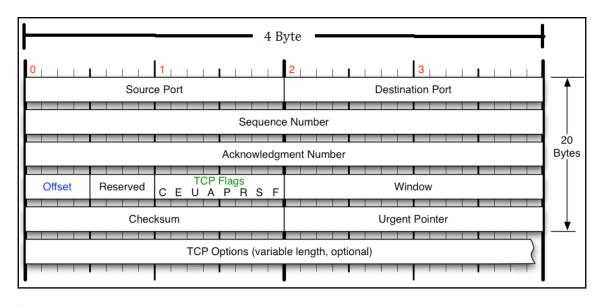
#### **Chapter 3: Sniffing and Penetration Testing**



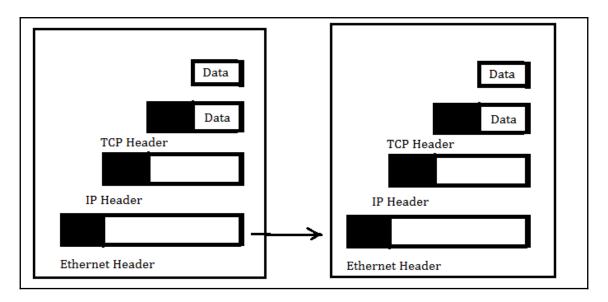








```
root@Mohit|Raj:~/Desktop# ifconfig eth0 promisc
    @Mohit|Raj:~/Desktop# ifconfig
eth0
         Link encap:Ethernet HWaddr 00:0c:29:4f:8e:35
         inet addr:192.168.0.10 Bcast:192.168.0.255 Mask:255.255.255.0
          inet6 addr: fe80::20c:29ff:fe4f:8e35/64 Scope:Link
        UP BROADCAST RUNNING PROMISC MULTICAST MTU:1500 Metric:1
         RX packets:7368 errors:0 dropped:0 overruns:0 frame:0
         TX packets:1549 errors:0 dropped:0 overruns:0 carrier:0
         collisions:0 txqueuelen:1000
         RX bytes:2335440 (2.2 MiB) TX bytes:178854 (174.6 KiB)
lo
         Link encap:Local Loopback
         inet addr:127.0.0.1 Mask:255.0.0.0
         inet6 addr: ::1/128 Scope:Host
         UP LOOPBACK RUNNING MTU:65536 Metric:1
         RX packets:652 errors:0 dropped:0 overruns:0 frame:0
         TX packets:652 errors:0 dropped:0 overruns:0 carrier:0
         collisions:0 txqueuelen:0
         RX bytes:39144 (38.2 KiB) TX bytes:39144 (38.2 KiB)
root@Mohit|Raj:~/Desktop#
```



```
0... = Congestion Window Reduced (CWR):
    .0. = ECN-Echo:
    .0. = Urgent:
    .0 = Acknowledgement:
    .0 = Push:
    .0 = Reset:
    ... 1. = Syn:
    ... 0 = Fin:
    ... 1. - Syn:
    ... 1. - Syn:
```

0	7 15			31
	Hardware type		Protocol type	
	Hardware address length	Protocol address length	Opcode	
	Source hardware address  Source protocol address  Destination hardware address  Destination protocol address			
Ι'				

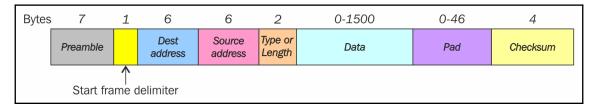
```
Interface: 192.168.0.1 --- 0x17
Internet Address Physical Address Type
192.168.0.10 00-0c-29-4f-8e-35 dynamic
192.168.0.11 00-0c-29-4f-8e-35 dynamic
192.168.0.255 ff-ff-ff-ff-ff static
224.0.0.22 01-00-5e-00-00-16 static
224.0.0.252 01-00-5e-00-00-fc static
239.255.255.250 01-00-5e-7f-ff-fa static
```

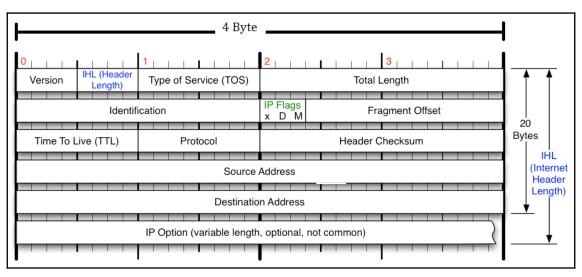
192.168.0.10	192.168.0.3	TCP	60 1024+80 [SYN] Seq=0 Win=8192 Len=0
192.168.0.3	192.168.0.10	TCP	60 80+1024 [SYN, ACK] Seq=0 Ack=1 win=
192.168.0.10	192.168.0.3	TCP	60 1024+80 [RST] Seq=1 win=0 Len=0

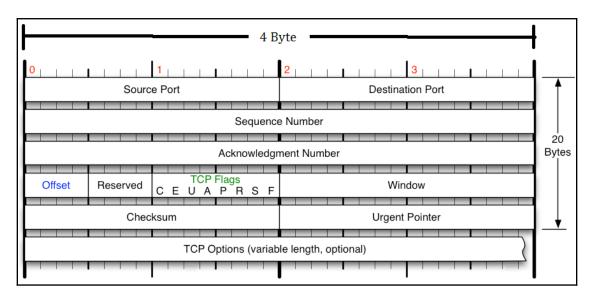
#### **Chapter 4: Sniffing and Penetration Testing**



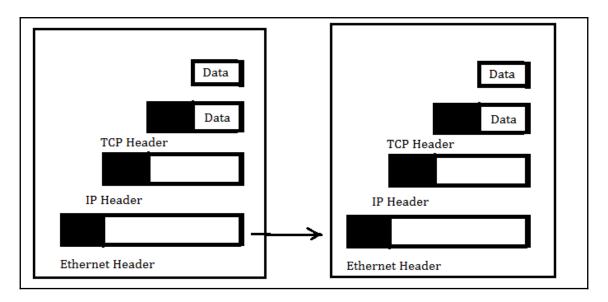








```
oot@Mohit|Raj:~/Desktop# ifconfig eth0 promisc
 oot@Mohit|Raj:~/Desktop# ifconfig
         Link encap:Ethernet HWaddr 00:0c:29:4f:8e:35
eth0
         inet addr:192.168.0.10 Bcast:192.168.0.255 Mask:255.255.255.0
         inet6 addr: fe80::20c:29ff:fe4f:8e35/64 Scope:Link
        UP BROADCAST RUNNING PROMISC MULTICAST MTU:1500 Metric:1
         RX packets:7368 errors:0 dropped:0 overruns:0 frame:0
         TX packets:1549 errors:0 dropped:0 overruns:0 carrier:0
         collisions:0 txqueuelen:1000
         RX bytes:2335440 (2.2 MiB) TX bytes:178854 (174.6 KiB)
lo
         Link encap:Local Loopback
         inet addr:127.0.0.1 Mask:255.0.0.0
         inet6 addr: ::1/128 Scope:Host
         UP LOOPBACK RUNNING MTU:65536 Metric:1
         RX packets:652 errors:0 dropped:0 overruns:0 frame:0
         TX packets:652 errors:0 dropped:0 overruns:0 carrier:0
         collisions:0 txqueuelen:0
         RX bytes:39144 (38.2 KiB) TX bytes:39144 (38.2 KiB)
root@Mohit|Raj:~/Desktop#
```



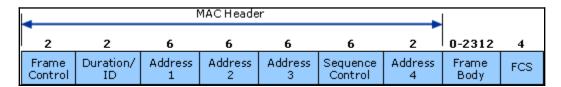
```
0... = Congestion Window Reduced (CWR):
    .0. = ECN-Echo:
    .0. = Urgent:
    .0 = Acknowledgement:
    .0 = Push:
    .0 = Reset:
    ... 1. = Syn:
    ... 0 = Fin:
    ... 1. - Syn:
    ... 1. - Syn:
```

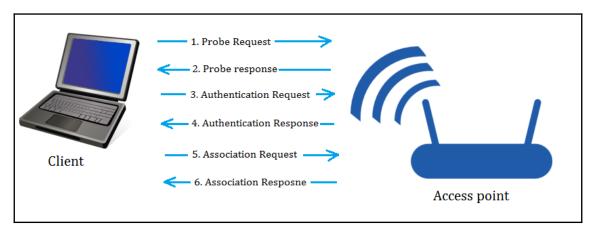
0	7 15			31
	Hardware type		Protocol type	
	Hardware address length	Protocol address length	Opcode	
	Source hardware address  Source protocol address  Destination hardware address  Destination protocol address			
Ι'				

```
Interface: 192.168.0.1 --- 0x17
Internet Address Physical Address Type
192.168.0.10 00-0c-29-4f-8e-35 dynamic
192.168.0.11 00-0c-29-4f-8e-35 dynamic
192.168.0.255 ff-ff-ff-ff-ff static
224.0.0.22 01-00-5e-00-00-16 static
224.0.0.252 01-00-5e-00-00-fc static
239.255.255.250 01-00-5e-7f-ff-fa static
```

192.168.0.10	192.168.0.3	TCP	60 1024+80 [SYN] Seq=0 Win=8192 Len=0
192.168.0.3	192.168.0.10	TCP	60 80+1024 [SYN, ACK] Seq=0 Ack=1 win=
192.168.0.10	192.168.0.3	TCP	60 1024+80 [RST] Seq=1 win=0 Len=0

#### **Chapter 5: Wireless Pentesting**





```
root@Mohit|Raj:~# airmon-ng
Interface
                Chipset
                                Driver
wlan0 -
                Atheros AR9271 ath9k - [phy1]
root@Mohit|Raj:~# airmon-ng start wlan0
Found 3 processes that could cause trouble.
If airodump-ng, aireplay-ng or airtun-ng stops working after
a short period of time, you may want to kill (some of) them!
PID
       Name
2470
        dhclient
2570
       NetworkManager
3112
       wpa supplicant
Interface
                Chipset
                                Driver
wlan0
                Atheros AR9271 ath9k - [phy1]
                                (monitor mode enabled on mon0)
root@Mohit|Raj:~#
```

Beacon Type (1 Byte)+ Flag (1 Byte) + Duration (2 byte) = 4 Bytes
Destination MAC + Source MAC + BSSID = 6+6+6 Bytes
Sequence number = 2 Bytes
Fixed Parameters = 12 Bytes
SSID parameter set = 1 Byte
SSID length = 1 Byte

```
Frame 663: 282 bytes on wire (2256 bits), 282 bytes captured (2256 bits) on interface 0
Radiotap Header vO, Length 18
▼ IEEE 802.11 Beacon frame, Flags: ......
    Type/Subtype: Beacon frame (0x08)
  ▶ Frame Control: 0x0080 (Normal)
    Duration: 0
    Destination address: Broadcast (ff:ff:ff:ff:ff:ff)
    Source address: PartIiRe_2e:a9:bc (00:1c:c2:2e:a9:bc)
    BSS Id: PartIiRe 2e:a9:bc (00:1c:c2:2e:a9:bc)
    Fragment number: 0
    Sequence number: 2753
▼ IEEE 802.11 wireless LAN management frame
  ▽ Fixed parameters (12 bytes)
      Timestamp: 0x00000000297f7326
      Beacon Interval: 0.102400 [Seconds]
    D Capabilities Information: 0x0431
  ▽ Tagged parameters (228 bytes)
    ▼ Tag: SSID parameter set: Wisdom
        Tag Number: SSID parameter set (0)
        Tag length: 6
        SSID: Wisdom
    D Tag: Supported Rates 1(B), 2(B), 5.5(B), 11(B), 9, 18, 36, 54, [Mbit/sec∦
     Tag: DS Parameter set: Current Channel: 1 /

√ Tag: Extended Supported Rates 6, 12, 24, 48, [Mbit/sec]

    ▶ Tag: Country Information: Country Code US, Environment Unknown 💯 🕬
    Dag: AP Channel Report: Regulatory 2 ass 32, Channel List: 1/2, 3
    ▶ Tag: AP Channel Report: Regulator / Class 33, Channel List
     D Tan. Traffic Indication Man (TJM). DTIM A of A hitman
....$Hl ...2...0
0040 82 84 8b 96 12 24 48 6c 03 01 01 32 04 0c 18 30
0050 60 07 06 55 53 00 01 0b 14 33 08 20 01 02 03 04
                                                      ..US... .3. ....
```

```
Press 'Y' to know previous result n
USE only Ctrl+c to exit
                           Channel SSID
Sea
      BSSID
      00:1c:c2:2e:a9:bc
                                  Wisdom
      24:65:11:85:9f:71
                                  Mechmonster
      d0:04:01:5d:3c:8a
                                  Winter is coming
      04:b1:67:c1:64:53
                           6
                                  BnNT-c3VjaGlrYWd1cHRhMTI
      14:3e:bf:eb:2f:f6
                           11
                                  MOHIT
      24:65:11:64:ab:c9
                                  Epic Events organisers
^Croot@Mohit|Raj:~/wireless_attack#
```

```
root@Mohit|Raj:/wireless# python ssid.py
WARNING: No route found for IPv6 destination :: (no SSID--> CITY PG2 -- BSSID --> 20:4e:7f:ac:e6:5c
SSID--> CITY PG3 -- BSSID --> 84:1b:5e:50:c8:6e
SSID--> bsnlbroad -- BSSID --> 68:5d:43:f9:91:84
SSID--> ANAND PG 4 -- BSSID --> 10:fe:ed:33:f8:d2
SSID--> MOHIT l RAJ -- BSSID --> 1a:dc:56:f0:26:89
SSID--> royal pg 4 -- BSSID --> 64:70:02:8f:5e:0a
```

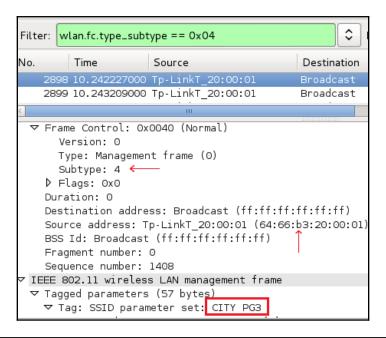
```
>>> frames[0]
<RadioTap version=0 pad=0 len=26 present=TSFT+Flags+Rate+Channel+dBm AntSignal+</pre>
x00\x00\x00' |<Dotll subtype=8L type=Management proto=0L FCfield= ID=0 addr1=ff
:ff:ff:ff:ff:ff addr2=84:1b:5e:50:c8:6e addr3=84:1b:5e:50:c8:6e SC=58320 addr4=N
one |<Dot11Beacon timestamp=84992922008 beacon interval=100 cap=short-slot+ESS+
privacy |<Dotl1Elt ID=SSID len=8 info='CITY PG3' |<Dotl1Elt ID=Rates len=8 inf
o='\x82\x84\x0b\x16$0Hl' |<Dotl1Elt ID=DSset len=1 info='\x04' |<Dotl1Elt ID=T
IM len=4 info='\x00\x02\x00\x00' |<Dotl1Elt ID=ERPinfo len=1 info='\x04' |<Dotl
<mark>1Elt</mark> ID=ERPinfo len=1 info='\x04<sup>'</sup> |<Dot11Elt ID=RSNinfo len=24 info='\x01\x00\
x00\x0f\xac\x02\x02\x00\x00\x0f\xac\x04\x00\x0f\xac\x02\x01\x00\x00\x0f\xac\x02\
xOc\x00' |<Dot11Elt ID=ESRates len=4 info='\x0c\x12\x18`' |<Dot11Elt ID=45 len
x00\x00\x00\x00\x00\x00\x00\x00' |<Dotl1Elt ID=61 len=22 info='\x04\x00\x17\x00
x00' |<Dotl1Elt ID=vendor len=24 info="\x00P\xf2\x02\x01\x01\x80\x00\x03\xa4\x0
```

```
Frame 1345: 347 bytes on wire (2776 bits), 347 bytes captured (2776 bits)
Radiotap Header vO, Length 26
▼ IEEE 802.11 wireless LAN management frame
  Fixed parameters (12 bytes)

▼ Tagged parameters (281 bytes)

    Dag: SSID parameter set: CITY PG3
    Tag: Supported Rates 1(B), 2(B), 5.5, 11, 18, 24, 36, 54, [Mbit/sec]
    Tag: DS Parameter set: Current Channel: 6
    Dag: Traffic Indication Map (TIM): DTIM O of O bitmap
    Dag: ERP Information
    Dag: ERP Information
    ▶ Tag: RSN Information
    Dag: Extended Supported Rates 6, 9, 12, 48, [Mbit/sec]
    D Tag: HT Capabilities (802.11n D1.10)
    Tag: HT Information (802.11n D1.10)
    ▶ Tag: Overlapping BSS Scan Parameters: Tag 74 Len 14
    D Tag: Extended Capabilities
    Dag: Vendor Specific: Microsof: WPS
    Dag: Vendor Specific: Broadcom
    Dag: Vendor Specific: Microsof: WPA Information Element
    Dag: Vendor Specific: Microsof: WMM/WME: Parameter Element
    ▶ Tag: Vendor Specific: Epigram: HT Capabilities (802.11n D1.10)
    Tag: Vendor Specific: Epigram: HT Additional Capabilities (802.11n D1.00)
```

```
root@Mohit|Raj:/wireless# python scapy ssid.py
WARNING: No route found for IPv6 destination :: (no default route?)
SSID--> -- BSSID --> 00:22:2d:7f:dc:06 -- Channel--> 3
SSID--> NOT CONNECTED -- BSSID --> 20:e5:2a:e5:9f:d0 -- Channel--> 2
SSID--> CITY PG3 -- BSSID --> 84:1b:5e:50:c8:6e -- Channel--> 6
SSID--> royal pg 4 -- BSSID --> 64:70:02:8f:5e:0a -- Channel--> 6
SSID--> CITY PG2 -- BSSID --> 20:4e:7f:ac:e6:5c -- Channel--> 6
SSID--> Micromax -- BSSID --> 64:70:02:db:b6:76 -- Channel--> 11
SSID-->
        -- BSSID --> 00:22:7f:26:e7:b9 -- Channel--> 12
SSID--> XT1068 2283 -- BSSID --> 80:6c:1b:92:92:ad -- Channel--> 9
SSID--> -- BSSID --> 00:22:7f:25:b5:d9 -- Channel--> 8
SSID--> MOHIT l RAJ -- BSSID --> la:dc:56:f0:26:89 -- Channel--> 6
SSID--> TNET3-H-Wi-Fi--Mob:-9212311428 -- BSSID --> 00:0c:42:39:fc:47 --
SSID--> TNET2--Wi-Fi--Mob:-9212311428 -- BSSID --> 00:0c:42:68:b7:3e -- C
SSID--> ROYAL-PG-FL00R 3 -- BSSID --> 40:4a:03:3e:36:26 -- Channel--> 11
SSID--> Mohit -- BSSID --> 88:53:2e:0a:75:40 -- Channel--> 6
^7
```



```
root@Mohit|Raj:/wireless# python probe_req.py
WARNING: No route found for IPv6 destination :: (no default route?)
Please enter the AP name CITY PG3
New Probe Request: CITY PG3
MAC 28:fb:d3:87:03:7a
New Probe Request: CITY PG3
MAC 9c:e6:e7:87:48:f8
New Probe Request: CITY PG3
MAC 88:53:2e:0a:75:3f
New Probe Request: CITY PG3
MAC 18:dc:56:f0:26:89
New Probe Request: CITY PG3
MAC 00:1f:e1:0f:dd:4a

The quieter you become, the more you are able to hear
```

```
root@Mohit|Raj:~/wireless_attack# python ssid_finder_raw.py
Press 'Y' to know previous result n
USE only Ctrl+c to exit
                                 Channel SSID
Seq
        BSSID
        00:1c:c2:2e:a9:bc
        24:65:11:85:9f:71
                                 11
                                         Mechmonster
        0c:d2:b5:45:9f:ac
                                 1
                                         EPIC EVENTS.
        24:65:11:51:49:39
                                 1
                                         Jaqjit Singh
        68:94:23:d2:fd:94
                                 1
                                         Net plus
        d0:04:01:5d:3c:8a
                                 10
                                         Winter is coming
^Croot@Mohit|Raj:~/wireless attack#
```

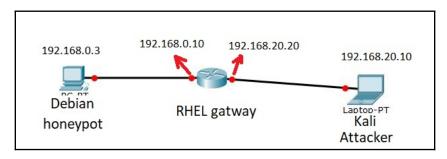
```
root@Mohit|Raj:~/wireless_attack# python hidden_ssid_finder_raw.py
Enter the MAC 00:1c:c2:2e:a9:bc
['3cf862d2e939']
SSID is Wisdom
^CBye
root@Mohit|Raj:~/wireless_attack#
```

```
root@Mohit|Raj:~/wireless_attack# python deauth_attack.py
WARNING: No route found for IPv6 destination :: (no default route?)
        BSSID
                                   Channel SSID
Sea
        d0:04:01:5d:3c:8a
                                   10
                                            Winter is coming
        0c:d2:b5:45:9f:ac
                                   1
                                            EPIC EVENTS.
        24:65:11:85:9f:71
                                   1
                                            Mechmonster
        24:65:11:51:49:39
                                   1
                                            Jagjit Singh
        08:96:d7:54:0a:f7
                                   1
                                            CHAUHAN
        68:94:23:d2:fd:94
                                   11
                                            Net plus
        84:5b:12:46:b4:21
                                   7
                                            QTL_SARABHANAGAR2
Enter the seq number of wifi 1
Are you Sure to attack on d0:04:01:5d:3c:8a Winter is coming
Enter the victim MAC or for broadcast press 0
. . . . . . . . . . . . . . . . . . . .
Sent 20 packets.
. . . . . . . . . . . . . . . . . . . .
Sent 20 packets.
. . . . . . . . . . . . . . . . . . .
```

```
root@Mohit|Raj:~/wireless_attack# python deauth_ids.py
{'d0:04:01:5d:3c:8a': 1}
{'d0:04:01:5d:3c:8a': 2}
{'d0:04:01:5d:3c:8a': 3}
{'d0:04:01:5d:3c:8a': 4}
{'d0:04:01:5d:3c:8a': 5}
{'d0:04:01:5d:3c:8a': 6}
{'d0:04:01:5d:3c:8a': 7}
{'d0:04:01:5d:3c:8a': 8}
{'d0:04:01:5d:3c:8a': 9}
{'d0:04:01:5d:3c:8a': 10}
{'d0:04:01:5d:3c:8a': 12}
{'d0:04:01:5d:3c:8a': 12}
{'d0:04:01:5d:3c:8a': 13}
{'d0:04:01:5d:3c:8a': 14}
```

```
{'d0:04:01:5d:3c:8a': 234}
{'d0:04:01:5d:3c:8a': 235}
{'d0:04:01:5d:3c:8a': 236}
{'d0:04:01:5d:3c:8a': 237}
{'d0:04:01:5d:3c:8a': 238}
{'d0:04:01:5d:3c:8a': 238, '68:94:23:d2:fd:94': 1}
{'d0:04:01:5d:3c:8a': 238, '68:94:23:d2:fd:94': 2}
{'d0:04:01:5d:3c:8a': 238, '68:94:23:d2:fd:94': 3}
{'d0:04:01:5d:3c:8a': 238, '68:94:23:d2:fd:94': 4}
{'d0:04:01:5d:3c:8a': 238, '68:94:23:d2:fd:94': 4}
{'d0:04:01:5d:3c:8a': 238, '68:94:23:d2:fd:94': 5}
^Z
```

### Chapter 6: Honeypot – Building Traps for Attackers



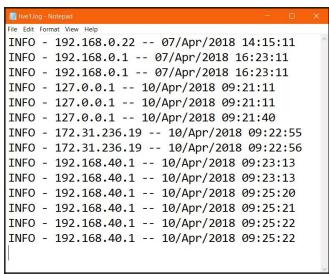
```
root@Mohit|Raj: /2nd_edition/network_scanning
      ohit|Raj:/2nd_edition/network_scanning# ping 192.168.0.3
PING 192.168.0.3 (192.168.0.3) 56(84) bytes of data.
64 bytes from 192.168.0.3: icmp_req=1 ttl=64 time=0.840 ms
64 bytes from 192.168.0.3: icmp_req=2 ttl=64 time=0.681 ms
^ Z
[3]+ Stopped
                              ping 192.168.0.3
      fohit|Raj:/2nd_edition/network_scanning# ping 192.168.0.20
PING 192.168.0.20 (192.168.0.20) 56(84) bytes of data.
64 bytes from 192.168.0.20: icmp_req=1 ttl=64 time=0.930 ms
64 bytes from 192.168.0.20: icmp_req=2 ttl=64 time=1.34 ms
64 bytes from 192.168.0.20: icmp_req=3 ttl=64 time=1.34 ms
^X64 bytes from 192.168.0.20: icmp_req=4 ttl=64 time=1.59 ms
64 bytes from 192.168.0.20: icmp_req=5 ttl=64 time=0.999 ms
[4]+ Stopped
                              ping 192.168.0.20
      ohit Raj: /2nd_edition/network_scanning# ping 192.168.0.245
PING 192.168.0.245 (192.168.0.245) 56(84) bytes of data.
64 bytes from 192.168.0.245: icmp_req=1 ttl=64 time=0.929 ms
64 bytes from 192.168.0.245: icmp_req=2 ttl=64 time=1.57 ms
64 bytes from 192.168.0.245: icmp_req=3 ttl=64 time=1.69 ms
[5]+ Stopped
                              ping 192.168.0.245
 oot@Mohit|Raj:/2nd_edition/network_scanning#
     Mohit|Raj:/2nd_edition/network_scanning#
   t@Mohit|Raj:/2nd_edition/network_scanning#
```

```
root@Mohit|Raj: /2nd_edition/network_scanning
File Edit View Search Terminal Help
root@Mohit|Raj:/2nd_edition/network_scanning# python ping_sweep_send_rec.py
Enter the Network Address 192.168.0.0
Enter the Starting Number 1
Enter the Last Number 254
S.no
        ΙP
001
      192.168.0.1
002
      192.168.0.2
003
      192.168.0.3
004
      192.168.0.4
005
      192.168.0.5
006
      192.168.0.6
007
      192.168.0.7
008
      192.168.0.8
009
      192.168.0.9
247
      192.168.0.247
248
      192.168.0.248
249
      192.168.0.249
250
      192.168.0.250
251
      192.168.0.251
252
      192.168.0.252
253
      192.168.0.253
254
      192.168.0.254
Time taken 0:00:01.102972
root@Mohit|Raj:/2nd_edition/network_scanning# nmap -sP 192.168.0.1-250
```

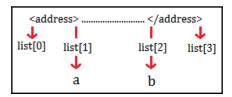
```
root@Mohit|Raj: ~/phy
File Edit View Search Terminal Help
root@Mohit|Raj:~/phy# nmap -sT 192.168.0.20
Starting Nmap 6.40 ( http://nmap.org ) at 2018-04-12 12:50 EDT
Nmap scan report for 192.168.0.20
Host is up (0.0079s latency).
Not shown: 997 filtered ports
PORT STATE SERVICE
80/tcp closed http
135/tcp open msrpc
445/tcp open microsoft-ds
MAC Address: 00:0C:29:43:6F:C7 (VMware)
Nmap done: 1 IP address (1 host up) scanned in 18.02 seconds
root@Mohit|Raj:~/phy# python port_scanner15.py
        Welcome, this is the Port scanner
       Press D for Domain Name or Press I for IP Address
        Enter the IP Address to scan: 192.168.0.20
        Enter the start port number 1
        Enter the last port number
For low connectivity press L and High connectivity Press H
Mohit's port Scanner is working on 192.168.0.20
******************
Port Open:--> 135 -- Microsoft EPMAP (End Point Mapper),
                                                               Unofficial
Port Open:--> 445 -- Microsoft-DS SMB file sharing Official
Exiting Main Thread
scanning complete in 0:02:21.862832
 coot@Mohit|Raj:~/phy#
coot@Mohit|Raj:~/phy# python port_scanner15.py
```

```
root@Mohit|Raj: ~/phy
File Edit View Search Terminal Help
root@Mohit|Raj:~/phy#
root@Mohit|Raj:~/phy# nmap -0 192.168.0.20
Starting Nmap 6.40 (http://nmap.org) at 2018-04-12 13:06 EDT
Nmap scan report for 192.168.0.20
Host is up (0.0085s latency).
Not shown: 997 filtered ports
PORT
        STATE SERVICE
80/tcp closed http
135/tcp open msrpc
445/tcp open microsoft-ds
MAC Address: 00:0C:29:43:6F:C7 (VMware)
Device type: terminal server
Running (JUST GUESSING): Lantronix embedded (85%)
OS CPE: cpe:/h:lantronix:ets32pr cpe:/h:lantronix:lrs16
Aggressive OS guesses: Lantronix ETS32Pr or LRS16 terminal server (85%)
No exact OS matches for host (test conditions non-ideal).
Network Distance: 1 hop
OS detection performed. Please report any incorrect results at http://nmap.org
Nmap done: 1 IP address (1 host up) scanned in 22.33 seconds
 coot@Mohit|Raj:~/phy#
```





## Chapter 7: Foot Printing a Web Server and a Web Application



```
G:\Project Snake\Chapter 5\program\info.py
Enter the URL http://192.168.0.5/
Coding is not good
Apache/2.2.3 (Red Hat) Server at 192.168.0.5 Port 80</
G:\Project Snake\Chapter 5\program\info.py
Enter the URL http://192.168.0.5/
error handling seems ok

G:\Project Snake\Chapter 5\program>
URL http://192.168.0.3/
Web page is using custome Error page
```

```
-----http://192.168.0.5/-----
   <!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">
3
   <html><head>
4
   <title>404 Not Found</title>
   </head><body>
6
   <h1>Not Found</h1>
   The requested URL /y was not found on this server.
8
   <hr>>
9
   <address>Apache/2.2.3 (Red Hat) Server at 192.168.0.5 Port 80</address>
10
   </body></html>
11
    -----http://192.168.0.5/-----
12
   <!DOCTYPE HTML PUBLIC "-//IETF//DTD HTML 2.0//EN">
13
   <html><head>
14
   <title>404 Not Found</title>
15
   </head><body>
16
   <h1>Not Found</h1>
17
   The requested URL /q was not found on this server.
18
   </body></html>
19
```

```
G:\Project Snake\Chapter 5\program>python header.py
Enter the URL http://www.juggyboy.com/
Connection: close
Date: Tue, 21 Oct 2014 17:45:24 GMT
Content-Length: 8734
Content-Type: text/html
Content-Location: http://www.juggyboy.com/index.html
Last-Modified: Sat, 20 Sep 2014 15:34:41 GMT
Accept-Ranges: bytes
ETag: "19a4e65e8d4cf1:7a49"
Server: Microsoft-IIS/6.0
X-Powered-By: ASP.NET

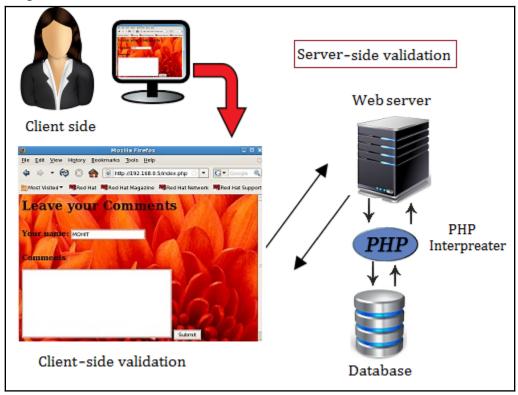
G:\Project Snake\Chapter 5\program>python header.py
Enter the URL http://192.168.0.5/
Date: Tue, 21 Oct 2014 17:51:16 GMT
Server: Apache/2.2.3 (Red Hat)
X-Powered-By: PHP/5.1.6
Content-Length: 1137
Connection: close
Content-Type: text/html; charset=UTF-8
```

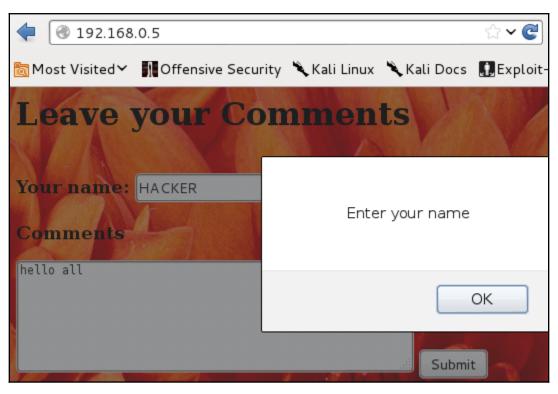
```
G:\Project Snake\Chapter 5\program>python header.py
Enter the URL http://192.168.0.6/
Date: Tue, 21 Oct 2014 18:23:31 GMT
Server: Apache
X-Powered-By: PHP/5.1.6
Content-Length: 1137
Connection: close
Content-Type: text/html; charset=UTF-8
```

```
C:\Windows\Svstem32\cmd.exe
K:\Book projects\New folder>python whois5.py
Enter the domain : thapar.edu
('Downloading:', 'http://whois.domaintools.com/thapar.edu')
IP address 14.139.242.109
                                    is hosted on a dedicated server
Location : -Punjab-Patiala-Thapar University Patiala
K:\Book projects\New folder>python whois5.py
Enter the domain : 14wisdom.com
('Downloading:', 'http://whois.domaintools.com/14wisdom.com')
IP address 107.180.1.1 - 166 other sites
                                                     hosted on this server
Location : -Arizona-Scottsdale-Godaddy.com Llc
K:\Book_projects\New folder>python whois5.py
Enter the domain : packtpub.com
('Downloading:', 'http://whois.domaintools.com/packtpub.com')
IP address 83.166.169.231 - 1 other site is
                                                         hosted on this server
Location : -England-Derby-Node4 Uk Hosting
K:\Book_projects\New folder>
```

root@Mohit Raj:/chapter 5# pyth	non banner.py		
HTTP/1.1 304 Not Modified Date: Sat, 25 Oct 2014 19:29:44			
Content-Location: http://www.juggyboy.com/index.html Last-Modified: Sat, 20 Sep 2014 15:34:41 GMT Accept-Ranges: bytes ETag: "19a4e65e8d4cf1:7a49"			
Server: Microsoft-IIS/6.0 X-Powered-By: ASP.NET			

#### **Chapter 8: Client-Side and DDoS Attacks**





```
root@Mohit|Raj:/chapter 6# python paratemp.py
Enter URL http://192.168.0.5/
paratemp.py:6: UserWarning: gzip transfer encodi
  br.set_handle_gzip(True)
<sample POST http://192.168.0.5/submit.php appli
  <TextControl(name=)>
  <TextareaControl(comment=)>
  <SubmitControl(submit=Submit) (readonly)>>
```





```
root@Mohit|Raj:/chapter 6# python sisp.py
WARNING: No route found for IPv6 destination
Enter the Source IP 192.168.0.45
Enter the Target IP 192.168.0.3
Enter the Source Port 56666
.
Sent 1 packets.
packet sent 1

Sent 1 packets.
packet sent 1244
.
Sent 1 packets.
packet sent 1245
.
```

1236 14.841969	192.168.0.45	192.168.0.3	TCP	56666 > http [SYN]
1237 14.862146	192.168.0.45	192.168.0.3	TCP	56666 > http [SYN]
1238 14.869791	192.168.0.45	192.168.0.3	TCP	56666 > http [SYN]
1239 14.877692	192.168.0.45	192.168.0.3	TCP	56666 > http [SYN]
1240 14.896820	192.168.0.45	192.168.0.3	TCP	56666 > http [SYN]
1241 14.904863	192.168.0.45	192.168.0.3	TCP	56666 > http [SYN]
1242 14.913225	192.168.0.45	192.168.0.3	TCP	56666 > http [SYN]
1243 14.921821	192.168.0.45	192.168.0.3	TCP	56666 > http [SYN]
1244 14.952965	192.168.0.45	192.168.0.3	TCP	56666 > http [SYN]

```
root@Mohit|Raj:/chapter 6# python simp.py
WARNING: No route found for IPv6 destination ::
Enter the Source IP 192.168.0.50
Enter the Target IP 192.168.0.3
.
Sent 1 packets.
packet sent 1
.
Sent 1 packets.
packet sent 2

Sent 1 packets.
packet sent 9408
.
Sent 1 packets.
packet sent 9409
^Z
```

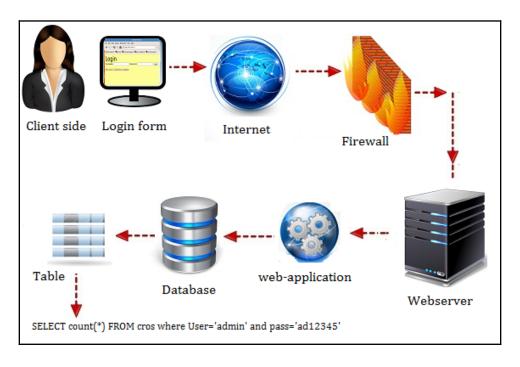
192.168.0.50	192.168.0.3	TCP	8943 >	http [SYN]
192.168.0.50	192.168.0.3	TCP	8944 >	http [SYN]
192.168.0.50	192.168.0.3	TCP	8945 >	http [SYN]
192.168.0.50	192.168.0.3	TCP	8946 >	http [SYN]
192.168.0.50	192.168.0.3	TCP	8947 >	http [SYN]
192.168.0.50	192.168.0.3	TCP	8948 >	http [SYN]
192.168.0.50	192.168.0.3	TCP	8949 >	http [SYN]
192.168.0.50	192.168.0.3	TCP	8950 >	http [SYN]



97 0.651057	174.239.29.59	192.168.0.3	TCP	smartsdp >
98 0.651173	192.168.0.3	174.239.29.59	TCP	http > smar
99 0.678485	174.239.29.59	192.168.0.3	TCP	svrloc > ht
100 0.678514	192.168.0.3	174.239.29.59	TCP	http > svrl
101 0.698433	174.239.29.59	192.168.0.3	TCP	ocs_cmu > h
102 0.698467	192.168.0.3	174.239.29.59	TCP	http > ocs_
103 0.722537	203.207.13.69	192.168.0.3	TCP	iclcnet_svi
104 0.722577	192.168.0.3	203.207.13.69	TCP	http > iclc
105 0.733643	203.207.13.69	192.168.0.3	TCP	accessbuild

```
dos.txt x
*********2014-11-08 00:23:26.177009******
DDOS Detected 74.250.16.72
DDOS Detected 52.61.254.220
DDOS Detected 252.248.12.216
```

## **Chapter 9: Pentesting SQL and XSS**



```
G:\Project Snake\Chapter 7\programs>login1.py
Enter the full URL http://192.168.0.6/
192.168.0.6/admin-login.php
192.168.0.6/admin.jhp
192.168.0.6/administrator/index.html
192.168.0.6/cp.html
192.168.0.6/login_out/
192.168.0.6/admin/

URL found --- 192.168.0.6/admin/
Press c for continue : c
192.168.0.6/signin/
192.168.0.6/signin/
192.168.0.6/administrator.html
192.168.0.6/administrator.html
192.168.0.6/adminpanel/
192.168.0.6/adminpanel/
192.168.0.6/isadmin.php
192.168.0.6/isadmin.php
192.168.0.6/loginerror/
192.168.0.6/loginerror/
192.168.0.6/bb-admin/index.html
192.168.0.6/bdmin/index.php

URL found --- 192.168.0.6/admin/index.php
Press c for continue :
```

```
G:\Project Snake\Chapter 7\programs>python data_handler.py
Press
C for Create, U for Update, R for retrieve
E for exit

*******************

Enter r

*******************

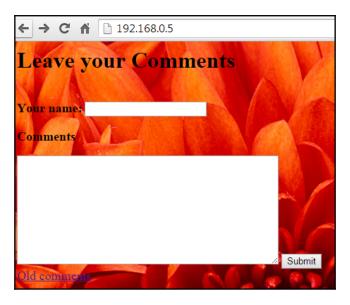
I'admin-login.php', 'admin.php', 'administrator/index.html',
p.html', 'login_out/', 'admin/', 'signin/', 'administrator.ht
anel-administracion/index.html', 'pages/admin/admin-login.php
'admincp/index.html', 'users/', 'bigadmin/', 'login/', 'super
min/', 'manage.php', 'adm/index.php', 'home.html', 'userlogin
'navSiteAdmin/', 'kpanel/', 'panel/', 'admin2.php', 'admin_ar
, 'adminitems/', 'admin/controlpanel.htm', 'Indy_admin/', 'ir
```

```
oot@Mohit|Raj:
                         # python sql form7.py
Enter URL http://192.168.0.6/admin/
sql form7.py:7: UserWarning: gzip transfer encoding
 br.set handle gzip(True)
<form1 POST http://192.168.0.6/admin/index.php appl</pre>
 <TextControl username=)>
 <PasswordControl(password=)>
 <CheckboxControl(remember=[1])>
 <SubmitControl(sub=Login) (readonly)>>
Enter the form name form1
Enter the Username username
Enter the Password password
         Success in 3 attempts
Successfull hit --> admin" #
oot@Mohit|Raj:
```

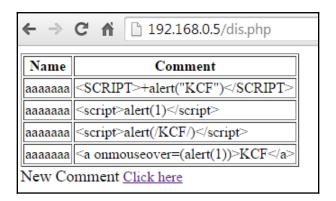
```
$uname = $_POST['user'];
$pass = $_POST['pass'];

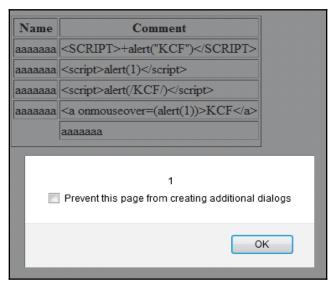
$uname = $_POST['user'];
$uname = mysql_real_escape_string($uname);

|
$pass = $_POST['pass'];
$pass = mysql_real_escape_string($pass);
```



```
root@Mohit|Raj: # pyt
Enter URL http://192.168.0.5/
                            # python xss.py
xss.py:8: UserWarning: gzip transfer encoding is
  br.set_handle_gzip(True)
<sample POST http://192.168.0.5/submit.php applic
  <TextControl(name=)>
  <TextareaControl(comment=)> <
  <SubmitControl(submit=Submit) (readonly)>>
Enter the attack field comment
Enter the normal field name
<SCRIPT>+alert("KCF")</SCRIPT>
Do you continue press y y ←
<script>alert(1)</script>
Do you continue press y y
<script>alert(/KCF/)</script>
Do you continue press y y <del><--</del>
<a onmouseover=(alert(1))>KCF</a>
Do you continue press y 🔇
```





```
G:\Project Snake\Chapter 7\programs>python xss_data_handler.py
Press
 C for Create.
               U for Undate.
                        R for retrieve
 E for exit
Enter
*******
xss
Total Number
Press
 C for Create,
               U for Update,
                        R for retrieve
 E for exit
Enter
```

```
# python xss list.py
root@Mohit|Raj:
Enter URL http://192.168.0.5/
xss list.py:7: UserWarning: gzip transfer encodin
  br.set handle gzip(True)
<sample POST http://192.168.0.5/submit.php applic</p>
  <TextControl(name=)>
  <TextareaControl(comment=)>
  <SubmitControl(submit=Submit) (readonly)>>
Enter the number of field "not readonly" 2
Enter the field name, "not readonly" name
Do you attack on this field? press Y n
Enter the field name, "not readonly" comment 🗲
Do you attack on this field?press Y n 🤇
<SCRIPT>+alert("KCF")</SCRIPT>
Do you continue press y y
<script>alert(1)</script>
Do vou continue press v n
```

```
# python xss list.py
root@Mohit|Raj:
Enter URL http://192.168.0.5/
xss list.py:7: UserWarning: gzip transfer encodi
 br.set handle gzip(True)
<sample POST http://192.168.0.5/submit.php appli</pre>
 <TextControl(name=)>
  <TextareaControl(comment=)>
 <SubmitControl(submit=Submit) (readonly)>>
Enter the number of field "not readonly" 2
Enter the field name, "not readonly" name 🚄
Do you attack on this field?press Y y 🤻
Enter the field name, "not readonly" comment
Do you attack on this field? press Y y 📥
<SCRIPT>+alert("KCF")</SCRIPT>
Do you continue press y y
<script>alert(1)</script>
Do you continue press y n
```



```
while($row = mysql_fetch_array($result)){
    //Display the results in different cells
    echo "" . $row['name']. "" . htmlspecialchars($row ['comment']) . "";
}
//Table closing tag
echo "";
```