

IT352: Information Assurance and Security

Lab Program 2

Name: Chinmayi C. Ramakrishna
Roll No.: 181IT113

Date of Submission: 3rd Feb, 2021

Output of hexa-dump file:

```
PS D:\Study Materials\6th Sem\IAS\Chinmayi\Lab Assignment 2> python 181IT113_IT352_P2.py
Test Case # 1
IPv4 Packet
Source MAC: c8.d9.d2.2a.1e.4f
Destination MAC: 01.00.5e.7f.ff.fa
Source IP: 10.100.53.246
Destination IP: 239.255.255.250
Source Port: 33271
Destination Port: 1900
Protocol: UDP

Test Condition 1: Allow packets with source IP 10.100.54.*
Deny Packet
Test Condition 2: Deny packets with destination port 80
Allow Packet
Test Condition 3: Deny packets with destination IP 10.100.53.1 and destination port 443
Allow Packet
Test Condition 4: Deny packets with source IP 10.100.54.*
Allow Packet
Test Condition 5: Deny all packets
Deny Packet

Test Case # 2
Invalid Packet

Test Case # 3
IPv4 Packet
Source MAC: c8.d9.d2.2a.1e.4f
Destination MAC: 01.00.5e.7f.ff.fa
Source IP: 10.100.53.246
Destination IP: 239.255.255.250
Source Port: 33271
Destination Port: 1900
Protocol: UDP

Test Condition 1: Allow packets with source IP 10.100.54.*
Deny Packet
Test Condition 2: Deny packets with destination port 80
Allow Packet
Test Condition 3: Deny packets with destination IP 10.100.53.1 and destination port 443
Allow Packet
Test Condition 4: Deny packets with source IP 10.100.54.*
Allow Packet
Test Condition 5: Deny all packets
Deny Packet
```

Test Case 1: Allow packets with source IP 10.100.54.*

```
PS D:\Study Materials\6th Sem\IAS\Chinmayi\Lab Assignment 2> python 181IT113_IT352_P2_TC1.py
Test Condition 1: Allow packets with source IP 10.100.54.*
Test Case # 1
IPv4 Packet
Source MAC: 6c.c2.17.77.00.a6
Destination MAC: 50.eb.1a.90.61.32
Source IP: 10.100.53.123
Destination IP: 54.72.51.51719
Source Port: 40224
Destination Port: 23113
Protocol: TCP

Deny Packet

PS D:\Study Materials\6th Sem\IAS\Chinmayi\Lab Assignment 2> █
```

Test Case 2: Deny packets with destination port 80.

```
PS D:\Study Materials\6th Sem\IAS\Chinmayi\Lab Assignment 2> python 181IT113_IT352_P2_TC2.py
Test Condition 2: Deny packets with destination port 80
Test Case # 2
IPv4 Packet
Source MAC: 50.eb.1a.90.61.32
Destination MAC: 6c.c2.17.77.00.a6
Source IP: 54.72.51.202
Destination IP: 10.100.53.123
Source Port: 8282
Destination Port: 1949
Protocol: TCP

Allow Packet
```

Test Case 3: Deny Packets with destination IP 10.100.53.1 and destination port 443

```
PS D:\Study Materials\6th Sem\IAS\Chinmayi\Lab Assignment 2> python 181IT113_IT352_P2_TC3.py
Test Condition 3: Deny packets with destination IP 10.100.53.1 and destination port 443
Test Case # 3
IPv4 Packet
Source MAC: 30.9c.23.50.ce.c0
Destination MAC: ff.ff.ff.ff.ff.ff
Source IP: 10.100.55.138
Destination IP: 255.255.255.255
Source Port: 61980
Destination Port: 1947
Protocol: UDP

Allow Packet
```

Test Case 4: Deny packets with source IP 10.100.54.*

```
PS D:\Study Materials\6th Sem\IAS\Chinmayi\Lab Assignment 2> python 181IT113_IT352_P2_TC4.py
Test Condition 4: Deny packets with source IP 10.100.54.*
Test Case # 4
IPv4 Packet
Source MAC: 6c.c2.17.77.00.a6
Destination MAC: 50.eb.1a.90.61.32
Source IP: 10.100.53.123
Destination IP: 13.33.142.118
Source Port: 2323
Destination Port: 443
Protocol: TCP

Allow Packet
```

Test Case 5: Deny all packets

```
PS D:\Study Materials\6th Sem\IAS\Chinmayi\Lab Assignment 2> python 181IT113_IT352_P2_TC5.py
Test Condition 5: Deny all packets
Test Case # 5
IPv4 Packet
Source MAC: 50.eb.1a.90.61.32
Destination MAC: 6c.c2.17.77.00.a6
Source IP: 13.33.142.118
Destination IP: 10.100.53.123
Source Port: 443
Destination Port: 2323
Protocol: TCP

Deny Packet
```