**Practical No 2**

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Topic: Write a program to scan network for host active status.

from scapy.all import \*

import sys

conf.verb = 0

TIMEOUT = 1

ip\_addr = input("Enter Destination IP address / IP Range(ex.192.168.1.1-50): ")

# ip\_addr = "192.168.1.1-20"

ip\_checker = ip\_addr.find('-')

if ip\_checker == -1:

packet = IP(dst=ip\_addr)/ICMP()

reply = sr1(packet, timeout=TIMEOUT)

if reply is None:

print(ip\_addr, "is DOWN")

else:

print(ip\_addr, "is UP")

else:

print("Range to Scan: ",ip\_addr,"\n")

ip\_addr\_splitted = ip\_addr.split(".")

ip\_addr\_splitted\_host = ip\_addr\_splitted[-1].split("-")

# print(ip\_addr\_splitted\_host)

for host in range (int(ip\_addr\_splitted\_host[0]),int(ip\_addr\_splitted\_host[1])+1):

ip\_address = ip\_addr\_splitted[0]+"."+ip\_addr\_splitted[1]+"."+ip\_addr\_splitted[2]+"."+str(host)

packet = IP(dst=ip\_address)/ICMP()

reply = sr1(packet, timeout=TIMEOUT)

if reply is None:

print(ip\_address, "is DOWN")

else:

print(ip\_address, "is UP")

# packet = IP(ip\_ad)/ICMP()

print("\n Packet Details: \n")

packet = IP(dst=ip\_addr)/ICMP()

packet.show()

