Exp 2 Basic networking commands

* ping google.com
* traceroute google.com #Display the route packets take to reach the destination.
* nslookup google.com #this will return the IP address of the domain or the domain name for a given IP
* netstat -a #The -a flag lists all active connections and listening ports.
* arp -a #This shows the current ARP table of the system
* rarp -d [interface] # It’s used to find the IP address when given a MAC address.
* ip addr show #This will show all the IP addresses configured on your system
* Ifconfig
* dig google.com #It provides detailed information about DNS resolution
* route -n #route -n

Exp4 Nmap

1. Sudo apt-get install nmap
2. nmap -sn 192.168.1.0/24 #This scans a range of IP addresses to find live hosts
3. nmap 192.168.1.10 #This will find open ports on a specific IP address or domain.
4. nmap -o 192.168.1.10 # detect the operating system, version, and services running on a host.
5. nmap -p 80 192.168.1.10 #scan for a particular service like HTTP on a specific port

Exp 5 Ip tables

Part 1 Set Up Multiple IP Addresses on a Single LAN

1. sudo ip addr add 192.168.1.100/24 dev <interface name>
2. ip addr show eth0 #verify the addr
3. sudo ifconfig eth0:0 192.168.1.100 netmask 255.255.255.0 #Assigning IP addresses to the network interface
4. ifconfig <interface name> # verify

Part 2 Using netstat and route Commands

1. netstat -rn #display routing table
2. netstat -n #shows the kernel routing table, displaying destinations, gateways, interfaces, and other route information.
3. sudo route add -net 192.168.2.0 netmask 255.255.255.0 gw 192.168.1.1 #This adds a route to the 192.168.2.0/24 network via the gateway 192.168.1.1.
4. sudo route del -net 192.168.2.0 netmask 255.255.255.0 #To delete the route
5. sudo route del default #Delete Existing Default Gateway

Part 3 not done

Exp 6 socket programming

#will be uploaded soon

Exp 8 Telnet

Part 1 : setup

1. Sudo apt-get install xinetd telnetd
2. Sudo gedit /etc/inetd.config #this opens the gedit file
3. telnet stream tcp nowait telnetd /usr/sbin/tcpd /usr/sbin/in.telnetd #add this line to the file
4. Sudo gedit /etc/xinetd.config #open this file

#Add this there

defaluts

{

log\_on\_success

instances=60

log\_type=SYSLOG authpriv

log\_on\_success= HOST PID

log\_on\_failure=HOST

cps=25 30

}

1. Sudo etc /init.d/xinetd restart #restart xinetd

Part 2 : test

1. Telnet <ipaddr of target device >
2. ls #list the files