

write down your observation and explain the usage of the command

- a. Netstat: display proto recv-Q send-Q local address foreign address and state. This command is often used for checking network connections
- b. ifconfig: used to configure and display all interfaces. Display interface name, IP address, netmask, broadcast address, and memory address.
- c. hostname: display system host's name or NIS domain name. You can set name and get name with it and
- d. ping: when just typing ping it gives an error message because we don't have specific server address to test the ping. Ping is used to verify network connectivity, measure latency, and detect packet loss
- e. traceroute: tracks the route packets taken from a network on their way to give host. It shows the host and packetlen. And it gives a lot of options to put in.
- f. telnet: telnet lets us connect to a remote server on a specific port. It is usually for testing server connectivity and open ports. Like SSH.
- g. host/dig: it gives answer section and additional section. Display IP addresses associated with domain names
- h. route: display Kernel IP routing table. Give destination gateway genmask and etc.
- i. arp: display and modifies the ARP table. Shows address HWtype HWaddress and etc. resolve ip address on a local network.

2. For the ping stat for us jp and uk. US is fastest then JP then UK which makes sense since we are physically closer to Japan server than UK server. But all of the servers did not get a packet loss probably due to small amount of data tested.

Rtt for uk is 0.154 ms rtt for us is 0.119ms rtt for jp is 0.139ms