Assignment-2

1. Types of file permissions in linux are write, read and execute.

2. Networking Commands are -

i) IP Config : Display basic details about the device's IP address configuration.

ii) Ping : Used to test a network host capacity to interact with another host.

iii) Netstat : Provides the statistics and information in the use of the current TCP-IP connection network.

iv) Hostname : To communicate with each other, the computer needs a unique address. Hostname defines a specific node or device in a network.

3. HTTP & HTTPS are used for transferring data between devices. HTTP is the foundation of the World wide web but it is not encrypted i.e. any attacker who intercepts an HTTP message can read it.

Whereas HTTPS is the secure version of HTTP. It encrypts the HTTP messages.
The default port of HTTP is 80 whereas that of HTTPS is 443.

Q4. A firewall is a network security device that monitors incoming and outgoing network traffic and decides whether to allow or block specific traffic based on a defined set of security rules.

Configuration -

1.) Secure your firewall -
=> Update your firewall to the latest vendor recommended firmware.
=> Delete, disable or rename any default user accounts and change all default passwords. Make sure to use only complex and secure passwords.

2.) Architect firewall zones and IP addresses - All the servers that provide ~~web~~ web-based services (e.g. email, VPN) should be organized into a dedicated zone that limits inbound traffic from the internet - often called a demilitarized zone or DMZ.

3.) Configure access control lists

4.) Configure other firewall services and logging

5.) Test firewall configuration

6.) Firewall Management

5.) Prerequisites to configure a server are -

i) User configuration

ii) Network configuration

iii) Package Management

iv) Update Installation & configuration

v) NTP configuration

vi) Firewalls and iptables

vii) Securing SSH

viii) Daemon configuration

ix) SE Linux & Further Hardening

x) Logging