Assignment 5

Write a short note on Firewall and VPN.

**Firewall**

* A firewall is a network security device or software that monitors and controls incoming and outgoing network traffic based on predefined security rules.
* It acts as a barrier between a trusted internal network and untrusted external networks, like the internet.
* The purpose is to block unauthorized access while allowing legitimate communication.
* There are two types :
* Hardware firewalls (physical devices)
* software firewalls (programs on a computer).
* It Protects networks from hackers, malware, and other threats by filtering traffic.

**VPN(Virtua Private Network)**

* A VPN is a technology that creates a secure, encrypted connection over a public network (like the internet).
* It allows users to safely access private networks from remote locations.
* The purpose is to protect data privacy and enable secure remote access.
* It encrypts all the data sent and received, hiding your IP address and location.
* It is Commonly used by remote workers, travelers, and anyone wanting to browse securely or access restricted content.