**Day 1 -Assignment 1**

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**Problem:** Write some network terminologies:

**Solution:**

1. IP Address: A unique numerical label assigned to each device connected to a computer network that uses the Internet Protocol for communication.

2. Router: A device that forwards data packets between computer networks, typically to create an overlay network.

3. Switch: A device that connects devices together on a computer network by using packet switching to receive, process, and forward data to the destination device.

4. Firewall: A network security system that monitors and controls incoming and outgoing network traffic based on predetermined security rules.

5. LAN (Local Area Network): A network that connects computers and devices within a limited area such as a residence, school, or office building.

6. WAN (Wide Area Network): A network that connects computers and devices over a large geographical area, such as between cities or countries, using private or public networks.

7. DNS (Domain Name System): The system used to translate domain names (like example.com) into IP addresses that computers use to identify each other on the network.

8. HTTP (Hypertext Transfer Protocol: The protocol used for transmitting web pages over the Internet.

9. HTTPS (Hypertext Transfer Protocol Secure): An extension of HTTP that adds encryption and security to data transmission over the Internet.

10. MAC Address (Media Access Control Address): A unique identifier assigned to network interfaces for communications on a physical network segment.

11. Packet: A unit of data transmitted over a network.

12. Bandwidth: The maximum rate of data transfer across a network path.

13. Latency: The time delay between the moment a data packet is sent and when it is received.

14. VPN (Virtual Private Network): A secure and private connection between networks over a public network like the Internet.

15. SSID (Service Set Identifier): A unique identifier attached to the header of packets sent over a wireless local area network.

These are just a few examples; networking encompasses a broad range of terms and concepts crucial for understanding how data communication works in today's interconnected world.