

Date  
9/1/25  
(Thursday)

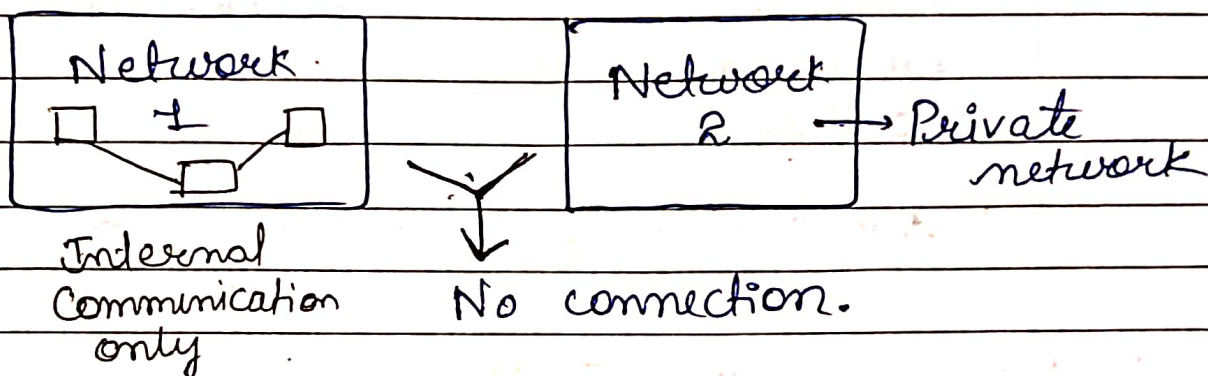
IWT



① Internet → System of networks.

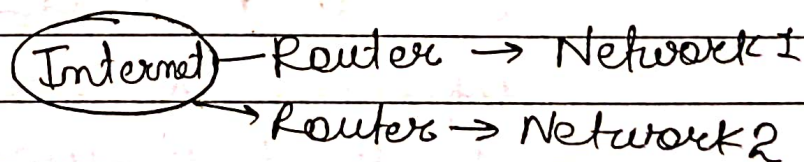
- In a network, more than one computer try to communicate with each other.

↳ devices are connected using networking devices like switch, router, hub



② Connection between two or more different networks is done through internet

③ wifi creates a private network as all the devices are interconnected and can communicate.



④ IP address is provided by Routers to each of the devices.

↳ Private Networks → IP address starts with 172.

⑥ After connecting to the Internet, devices get Public IPs.

↳ and using public IP's we can connect to other devices, can get access.

⑦ ISP's provide public IPs → (windows)

⑧ Remote desktop Communication → using wifi  
↳ one system can be connected to other or can be accessed through other.

↳ Similar thing can be done in linux

## ★ History of Internet

① After launch of Sputnik by Soviet Union.

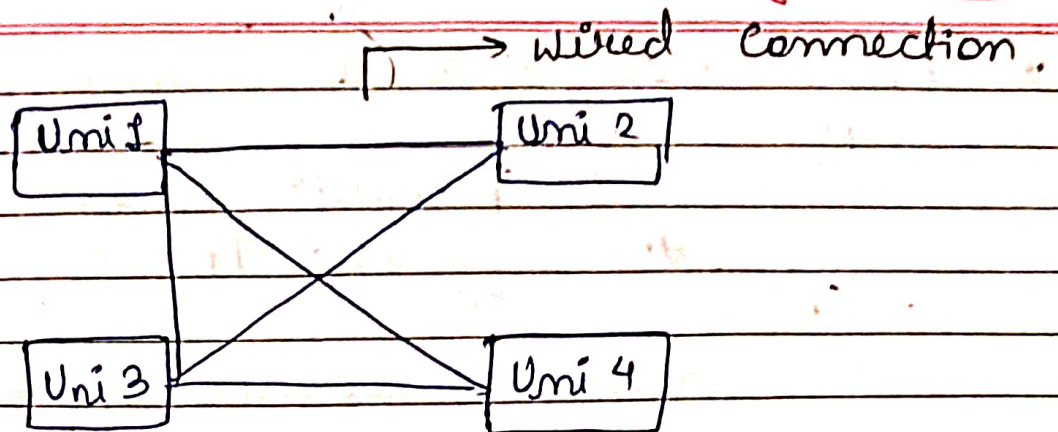
↳ Internet was created to help military agency.

↳ USA started [Advance Research project Agency] (A R P A) (1969)

↳ So that Researches going on at different agencies / universities could be Synced and was not isolated, so that all universities could work collaborately.

② Initially communication between two universities was done through wire





- ⑥ When 10 computers were connected initially using wires, that was the first private network known as **[ARPANET]**
- ⑥ ARPANET was used by military agency.
- ⑥ Connection was limited within a network only.
  - ↳ as different networks had different rules to communicate or to connect
- ⑥ So In 1983, a common set of rules was launched.
  - ↳ TCP/IP.
    - ↳ Transmission control Protocol.
- ⑥ In 1990 - world wide web was introduced - which connected all the available networks to each other
  - WWW → Protocol.

→ Domain name Server.

⑥ After that DNS was introduced

↳ which provided domain names to different IP addresses present

Public IP address → Domain name.

⑥ Vinton cerf and Robert Bob Kahn developed ARPA / TCP IP (also developed TCP)

↳ So they are known as fathers of internet.

↳ they were the first to think about connection.

⑥ http, html, url were developed by

↳ After all these, internet was publically accessible and growth of internet was exponential.

⑥ Server → a computer that provides Services to users.

↳ computing devices

↳ Storage services (hard disk)

↳ Web Server (Apache, nginx, IIS <sup>→ glassfish</sup> (by default installed))

↳ Database Server

↳ FTP Server

↳ Application Server



⑥ Database Server :- MongoDB, SQL

⑥ own application server can be built using RMT, Socket Server.