

\* Network Devices: HUB, Switch, BRIDGE, Gateway, Modem, Router, Repeater etc

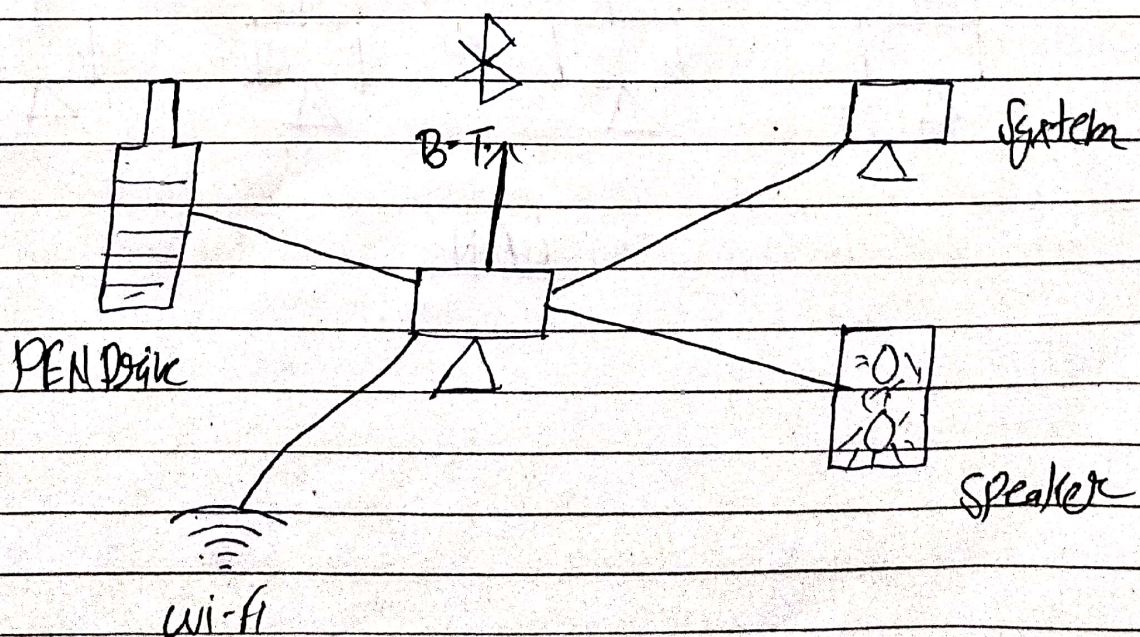
\* Network Types: Types of Computer Network:

① PAN: Personal Area Network

PAN connects electronic devices within a user's immediate area. The size of a PAN range from a few centimeters to a few meters. One of the most common real-world eg. of a PAN is the connection b/w a Bluetooth earpiece and a smartphone.

RANGE  $\Rightarrow < 10m$

Use  $\Rightarrow$  Home (for personal use)



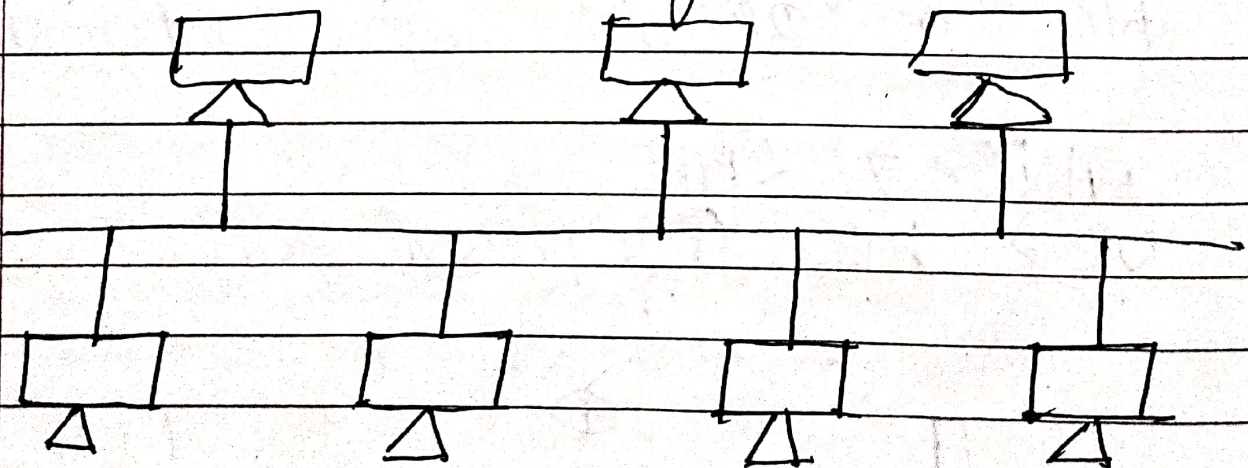


## LAN: Local Area Network

LAN connects network devices in such a way that personal computers and workstations can share data, tools, and programs. The group of computers and devices are connected together by a switch or stack of switches, using a private addressing scheme as defined by the TCP/IP protocol.

Range:  $< 150$  M

Use: office (Building)

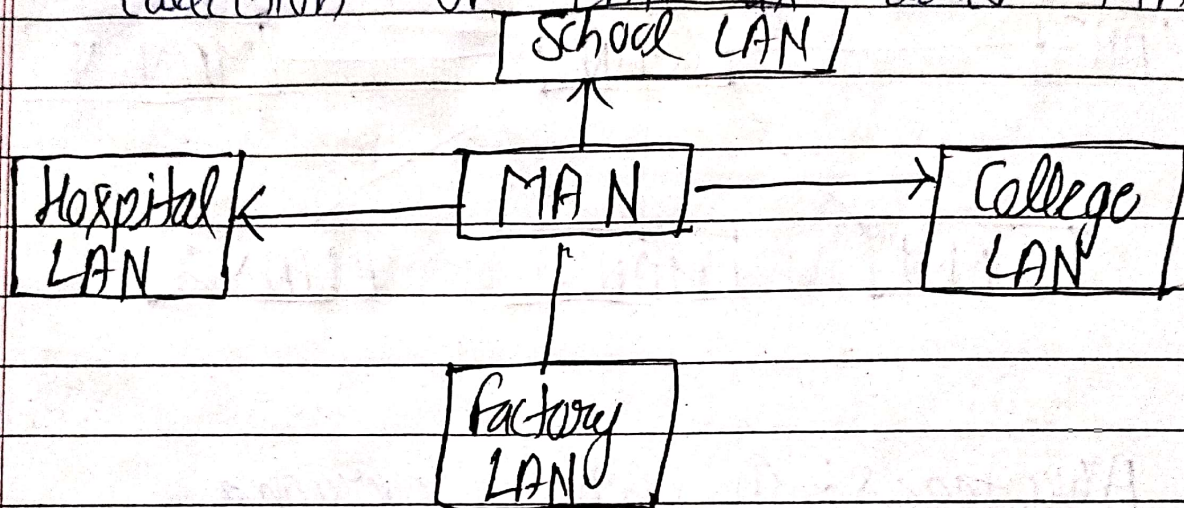


LAN



### 3 MAN: Metropolitan Area Network:

Collection of LAN is called MAN.



Range : < 50 km

Use: Within city

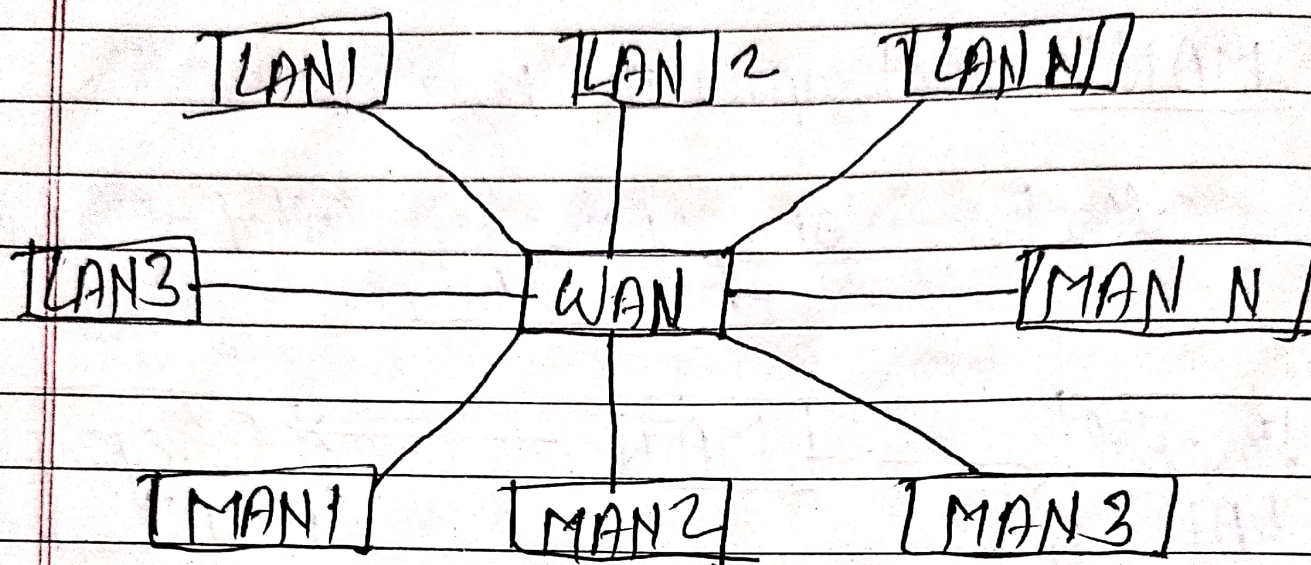
### 4 WAN: Wide area Network

Collection of LAN and MAN is called WAN.

Range: Not fixed

Use: Use for ~~country~~ countries or All around world.





Advantages:

- ① open to everyone
- ② file sharing
- ③ security
- ④ Easy to add new devices.
- ⑤ Backup and storage

Disadvantage:

- ① New devices required
- ② virus attack
- ③ Required Handler
- ④ High Speed Internet
- ⑤ Server