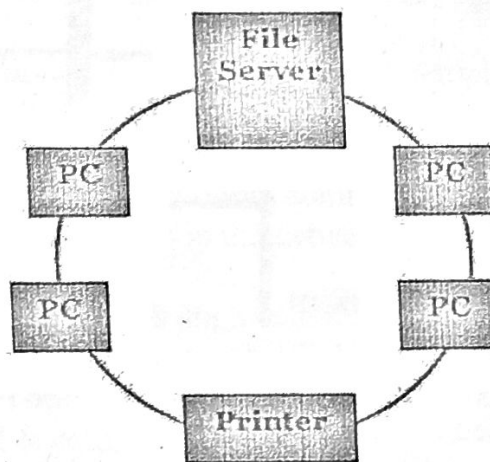- A network set up in which computers & other peripherals are directly connected to a central hub is called star topology
- Hub is a device that controls & manages the data communication between computers by establishing a logical path between them
- In star topology, the data sent by a source machine will pass through hub before reaching its destination
- **Advantages:** easy to install & configure, easy to remove the nodes from the network, more reliable & easy to detect faults in the network
- **Disadvantages:** if the central hub fails, then the entire network will break down & difficult to locate problem, requires more cabling & more expensive

3 Ring topology

- A network set up in which computers & other peripherals are directly interconnected in a circular fashion to form a ring is called ring topology
- In ring topology, the first node is connected to second, second is connected to third & so on, finally the last node is connected to first node. Thus, forms a ring
- In this topology, data transmission takes place only in one direction
- It is called ring topology because it forms a ring such that one computer is connected to another computer, with the last one connected to the first. Exactly two neighbours for each device.
- **Advantages:** requires less cabling, less expensive, no data collision, easy to install & configure
- **Disadvantages:** if the ring is broken, then entire network will break down, difficult to remove/add a node to network & delay in data transmission

6