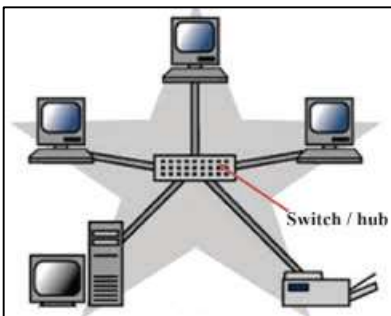


## 1.5 Network Topologies

Network topology is the pattern of connection in designing computer network. There are different types of network topologies. Those are,

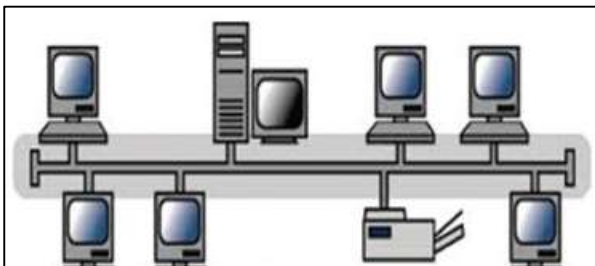
1. Star Topology
2. Bus Topology
3. Ring Topology
4. Tree Topology

### 1. Star Topology



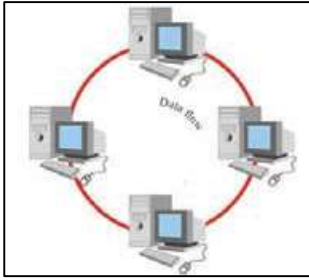
- This is a commonly used design and built by centralizing a switch/hub and computers.

### 2. Bus Topology



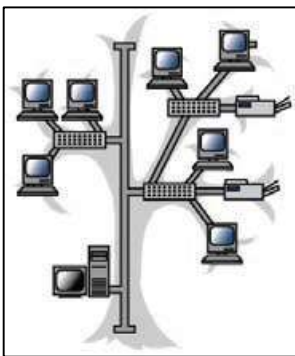
- Here, all the connections are established through a main cable. This cable is called the backbone because any issue with the network affects all the computers in the network. This design is easy in networking and fewer cables are required. However, a limited number of computers can be connected.

### 3. Ring Topology



- Here, computers are positioned in a ring/bangle and connected through cables. Data or information move in a circular manner. The breakdown of one computer or cable can lead to the breakdown of the entire network.

### 4. Tree Topology



- Tree topology has characteristics of both bus and star topologies. In this design several star topologies are connected to a bus backbone cable. One of the advantages of this is the ability to control each network individually.