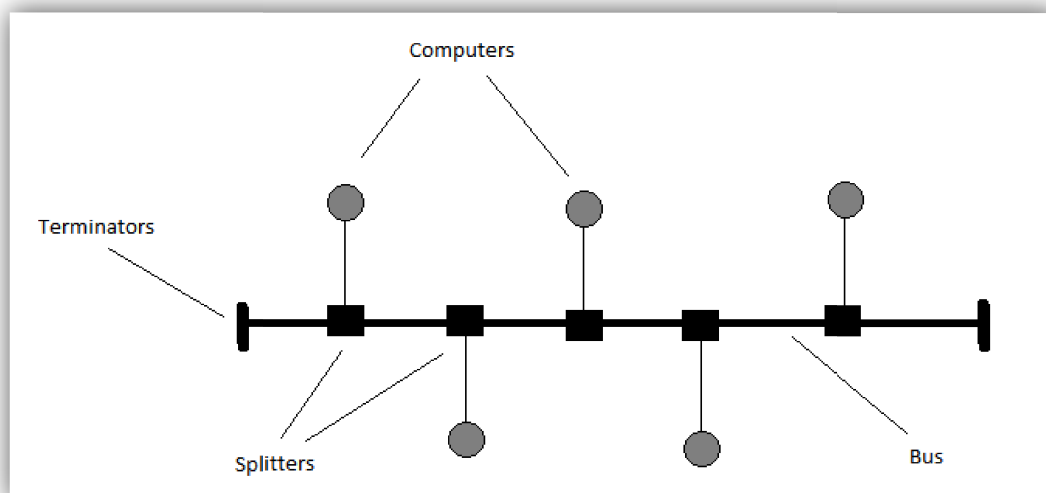


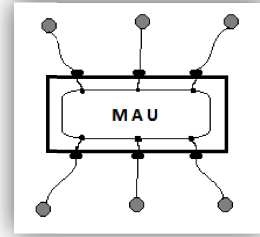
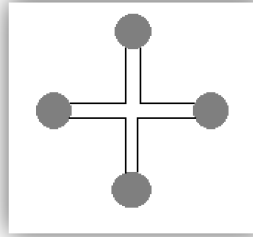
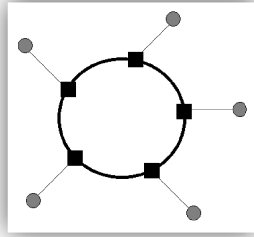
Topology: Topology is the physical arrangement of PCs in a network. The order of connectivity and physical placement both are key components of a topology. Following are the main topologies that we commonly find in networks.

- 1.** Bus Topology
- 2.** Ring Topology
- 3.** Star Topology
- 4.** Tree Topology
- 5.** Mesh Topology
- 6.** Graph topology

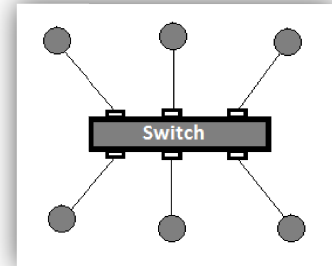
- 1. Bus topology:** In this topology, all the PCs are connected to a common bus. The bandwidth of this common bus is usually high enough to carry the traffic of all machines connected to it. On the level of physical connectivity, there is no any security to the data from being accessed by the unwanted receivers. All data is open for all the machines in this topology.



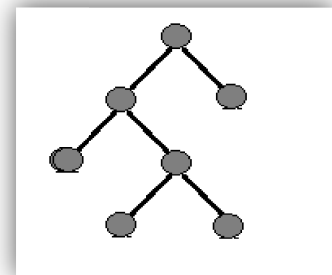
- 2. Ring Topology:** Ring topology is a different arrangement in which all machines are connected in a closed ring like bus. It is very similar to a bus topology but with a major change that the ends of the common bus are not terminated. Instead, both ends are connected together. Following are the three popular ways to create ring topology.



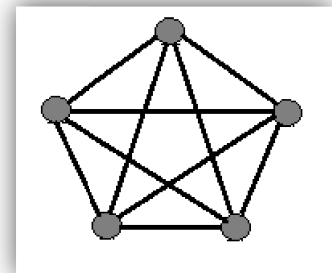
3. **Star Topology:** This topology is created by using a hub or a switch. All machines are connected with a central hub / switch using separate lines. In a simple LAN like Ethernet, star topology is mostly used.



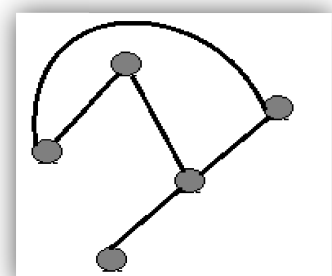
4. **Tree Topology:** Machines in this topology are connected in a tree-like hierarchy. Two or more machines are connected with one single machine. Similarly another layer of some machines is added to the previous layer. Usually this topology works in hierarchical WANs.



5. **Mesh Topology:** This topology connects all machines together with discrete links. All machines connect one-another using direct links. Although this link can be wired or wireless but usually this topology is found in WLANs.



6. **Graph Topology:** This topology does not possess any pattern for physical connectivity among machines. Any machine can connect to any other machine via direct or indirect links. May be two or more machines are not directly connected.



Assignments:

- 1.** What do you understand by Topology? List out all the major types of it.
- 2.** Briefly discuss about-
 - a.** Bus Topology
 - b.** Ring Topology
 - c.** Star Topology