**Lab 5**

**Introduction:**

we have implemented point to point, CSMA and Wi-Fi topologies. In today's lab we are going to strengthen those skills with implementation of the Star topology.In star topology, all the devices are connected to a single hub through a cable. This hub is the central node and all other nodes are connected to the central node. The hub can be passive in nature i.e., not an intelligent hub such as broadcasting devices, at the same time the hub can be intelligent known as an active hub. Active hubs have repeaters in them.

**Objective:**

Implement the star network topology

**Advantages:**

If N devices are connected to each other in a star topology, then the number of cables required to connect them is N. So, it is easy to set up. Each device requires only 1 port i.e. to connect to the hub, therefore the total number of ports required is N.

**Disadvantages:**

If the concentrator (hub) on which the whole topology relies fails, the whole system will crash down.

The cost of installation is high.

Performance is based on the single concentrator i.e. hub.

**ISSUE:**

.NO issues found regarding this lab.

**CONCLUSION:**

In this lab we perform the whole task with star topology .Star topology holds client-server connection. Whereas ring topology is a peer-to-peer connection type. The networks formed by star topology are quite expensive as compared to that of ring topology. In star topology, the complete network will fail only when the central hub gets failed.