CNT Assignment 5

* **Aim :** Using a network simulator configure :
- i) VLAN
- ii) Dynamic trunk protocol
- iii) Spanning tree protocol

* **Theory :**

① **VLAN**

- VLAN is a logical grouping of network devices. We break large broadcast domains into smaller broadcast domains.

- Two VLANS cannot communicate with each other without router.

Access Link

- In access link, switch port is connected with a device that has standardized Ethernet NIC.

- Access link connection can only be understood with single VLAN. That means all devices connected will be in single broadcast domain.

② Trunk Link

- Here switch port is connected with a device that is capable to understant multiple VLANS.

- Trunk link connection is used to connect two switches or switch router. Trunking allows us to send / recieve VLAN information across network.

③ STP

- Spanning tree protocol is a network protocol designed to prevent layer 2 loops.

- It is standardised as IEEE 802.D protocol

- STP blocks some ports on switches with redundant link to prevent broadcast storms & ensure loop free topology.

* Conclusion : Thus we have configured VLAN, Trunk link & STP.