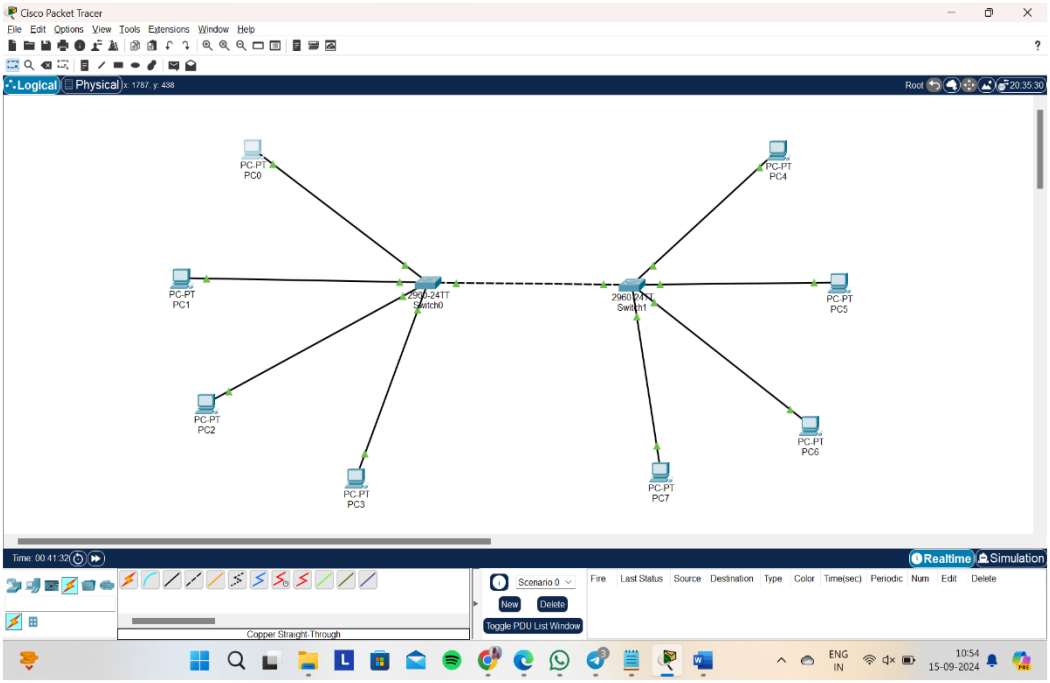
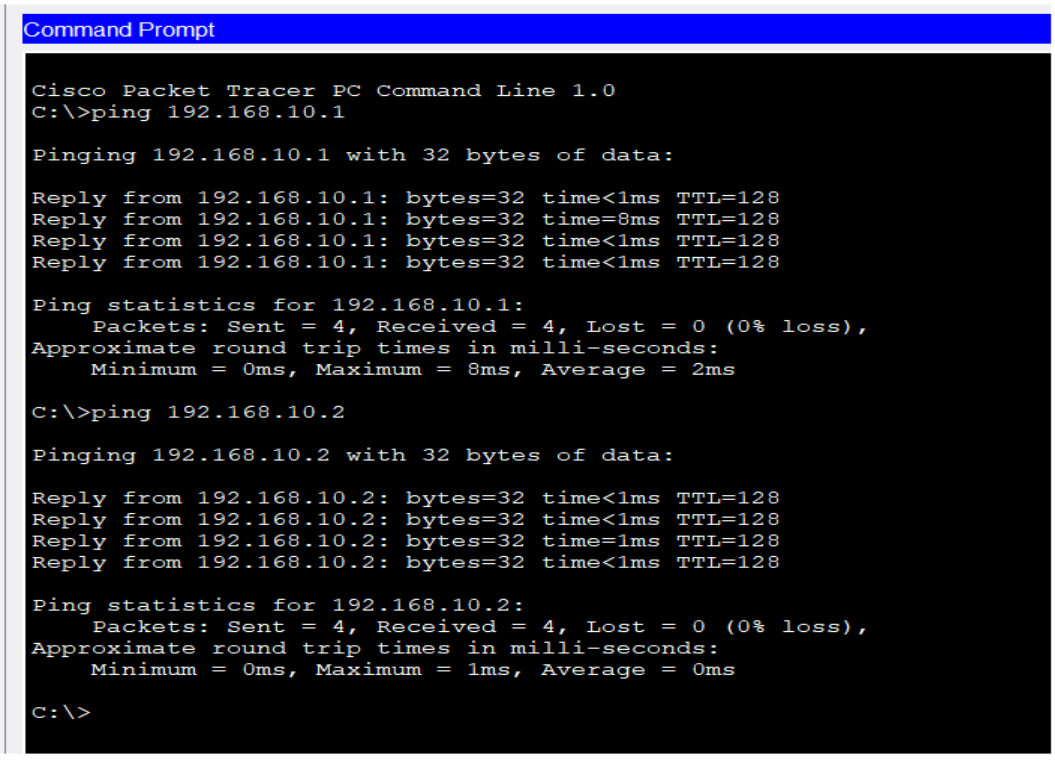
Exp.no-4:Construction of Different VLANS and TRUNKING using cisco packet tracer

Diagram:



Output:



1. **Create a New Project**: Began a new project and arranged the networking devices (routers, switches, and computers) as shown in the provided network diagram.
2. **Configure IP Addresses**: Assigned appropriate IP addresses and subnet masks to each device according to VLAN design.
3. **Set Up VLANs**:
    - Accessed the switch's command line interface (CLI).
    - Create VLANs using the vlan command.
    - Assigned ports to the respective VLANs using the switchport access vlan command.
4. **Configure Trunking**:
    - On the switches, configure trunk ports to allow traffic from multiple VLANs to pass through.
    - Used the switchport mode trunk command to set the ports to trunk mode.
5. **Test Connectivity**:
    - Used the ping command from different computers to test connectivity across VLANs.
    - Verified that devices within the same VLAN can communicate with each other.
    - Ensured that devices in different VLANs cannot communicate unless routing is set up between them.
6. **Verify Results**: Check the output of your ping tests to confirm successful communication within VLANs and proper isolation between different VLANs.