

Exp NO: 6.

Date: 15.8.25

AIM: setup and configure a LAN using a switch and Ethernet cables in your lab

what is a LAN?

A LAN refers to network that connects devices within a limited area - office, school or home. It enables users to share resources - data, printers and Internet access.

A LAN switch serves as the primary connecting device, managing and directing communications within the local network.

How to set up a LAN

step 1:

Plan and design an appropriate network topology taking into account network reqn.

step 2:

Take 4 computers, a switch with 8, 16 or 24 ports and 4 ethernet cables

step 3:

connect the computers to network switch via an Ethernet cable

step 4:

Assign IP addresses to the PCs.

1. client computer - Admin / owner
2. Network and Internet connections
3. LAN / Ethernet → Properties → Internet Protocol → Properties → Assign IP.

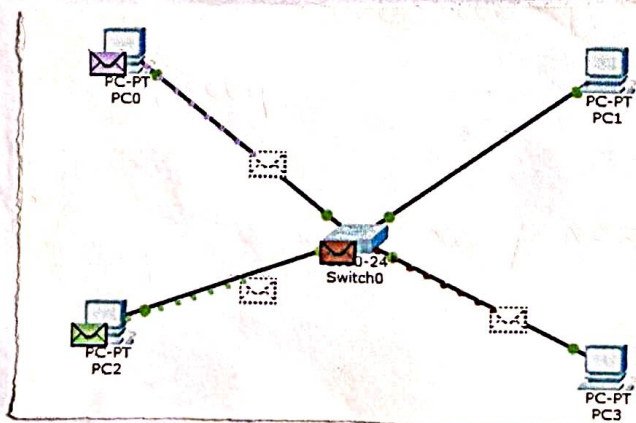
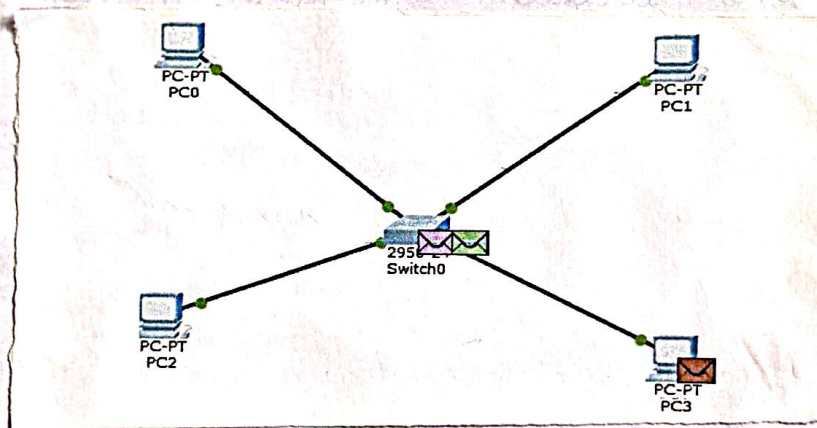
Step 5:

configure network switch

step 6:

check the connectivity between switch and other machine by using ping command

Output in CISCO PACKET TRACER



RESULT:

The LAN connection setup was done using switch and Ethernet cables and simulated the same in CISCO PACKET.

16/12