

Experiment:7

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Branch: CSE **Section/Group:**22BCS_IOT-627-B **Date of Performance:**17-09-2024

Subject Name: Computer Networks **Subject Code:** 22CSH-312

1. Aim/Objective-

Connect the computers in Local Area Network by setting IP Address, Subnet mask & Default gateway.

2. Requirements-

S/W Requirement :- Packet Tracer or NS2

H/W Requirement: - Processor, Main Memory (128 MB RAM), Hard Disk(

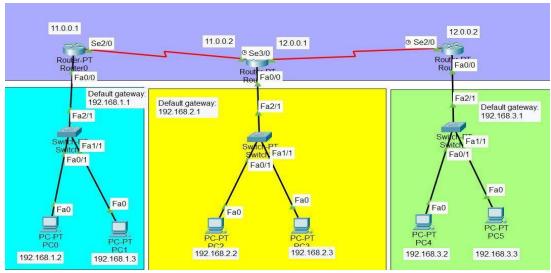
minimum 20 GB IDE Hard Disk), Removable Drives,

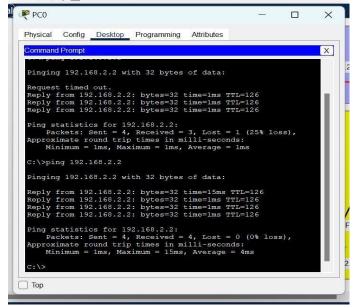
PS/2 HCL Keyboard and Mouse

3. Procedure-

- Step 1: First, open the Cisco packet tracer desktop and select the devices and give them suitable ip addressing
- Step 2: Then, create a network topology as shown below the image.
- Step 3:Configure the PCs (hosts) with IPv4 address and Subnet Mask according to the IP addressing
- Step 4: Assigning IP address using the ipconfig command.
- Step 5: Configure router with IP address and subnet mask.
- Step 6: After configuring all of the devices we need to assign routes to the routers.
- Step 7: Verifying the network by pinging the IP address of any PC. We will use the ping command to do so.

4. Output-





5. Learning Outcomes-

- 1. Understand the setup and configuration of ip addressing, subnet mask.
- 2. Learn to use Cisco Packet Tracer to simulate different network designs.
- 3. Gain practical skills in configuring network devices and analyzing their connectivity.