EXPT: 14 LEARNING AND ASSIGNMENT OF IP ADDRESS MANUALLY TO COMPUTERS

AIM:

To manually assign IPv4 addresses, subnet mask, and default gateway to computers in a network and verify connectivity between hosts.

ALGORITHM:

1. Prepare network devices:

o   Place 2 PCs and 1 switch (and router if using a gateway) in Packet Tracer.

2. Connect devices:

o   Use Copper Straight-Through cable:

▪   PC → Switch

▪   Switch → Router (optional)

3. Assign IP addresses:

IP Address: 192.168.1.1

Subnet Mask: 255.255.255.0

IP Address: 192.168.1.2

Subnet Mask: 255.255.255.0

4.   Verify connectivity:

●   On PC0 → Command Prompt → ping 192.168.1.2

●   On PC1 → Command Prompt → ping 192.168.1.1

OUTPUT:

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Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.1

Pinging 192.168.1.1 with 32 bytes of data:

Reply from 192.168.1.1: bytes=32 time=13ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128
Reply from 192.168.1.1: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 13ms, Average = 3ms
```

RESULT:

Manual IP addresses were successfully assigned to the PCs.