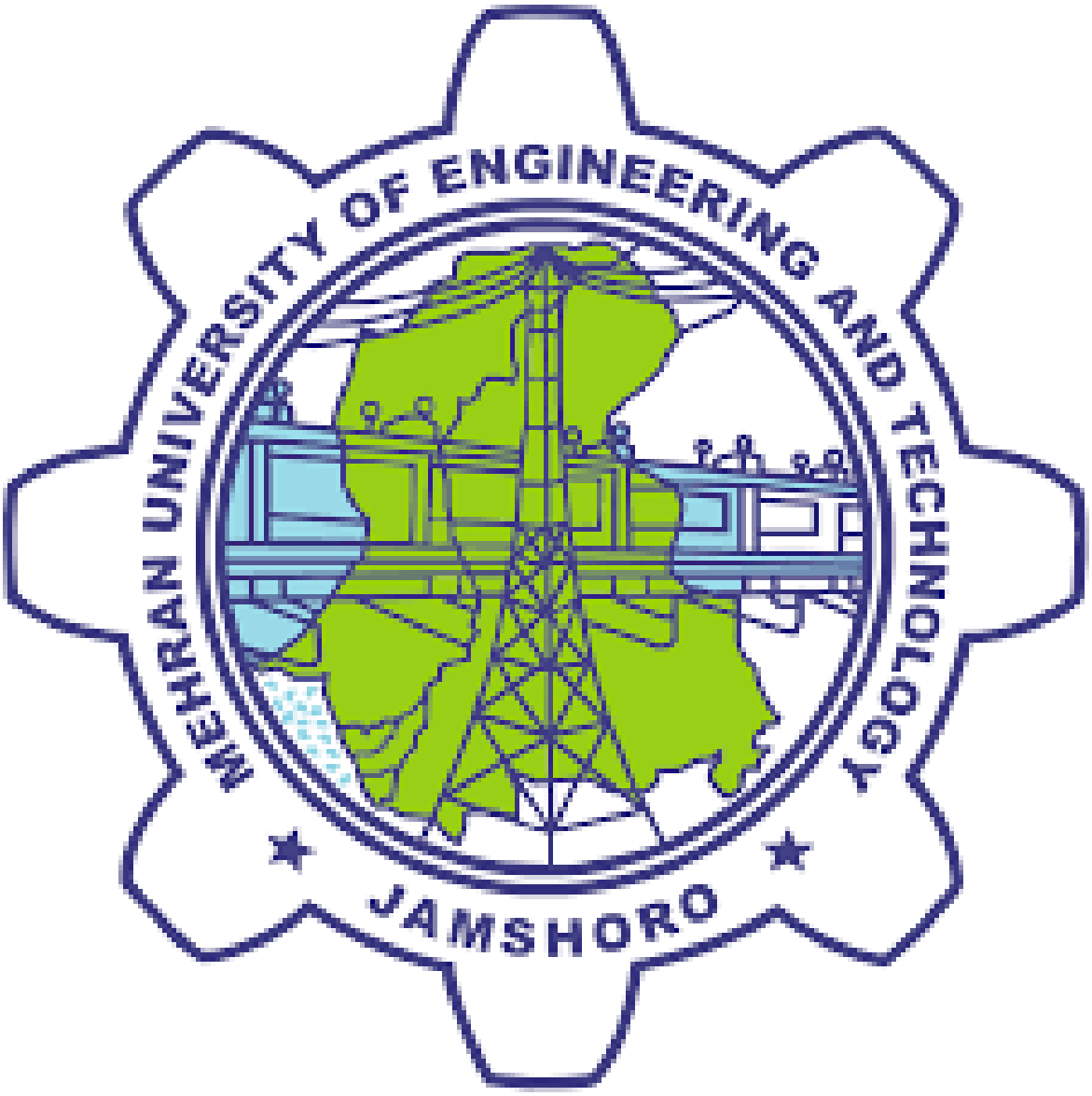
Name: ZOHAIB HASSAN SOOMRO

RollNo#: 19SW42

Subject: CN(pr)

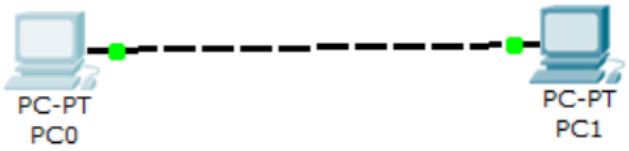


1. Which cable did you use to connect workstations in Task 3?

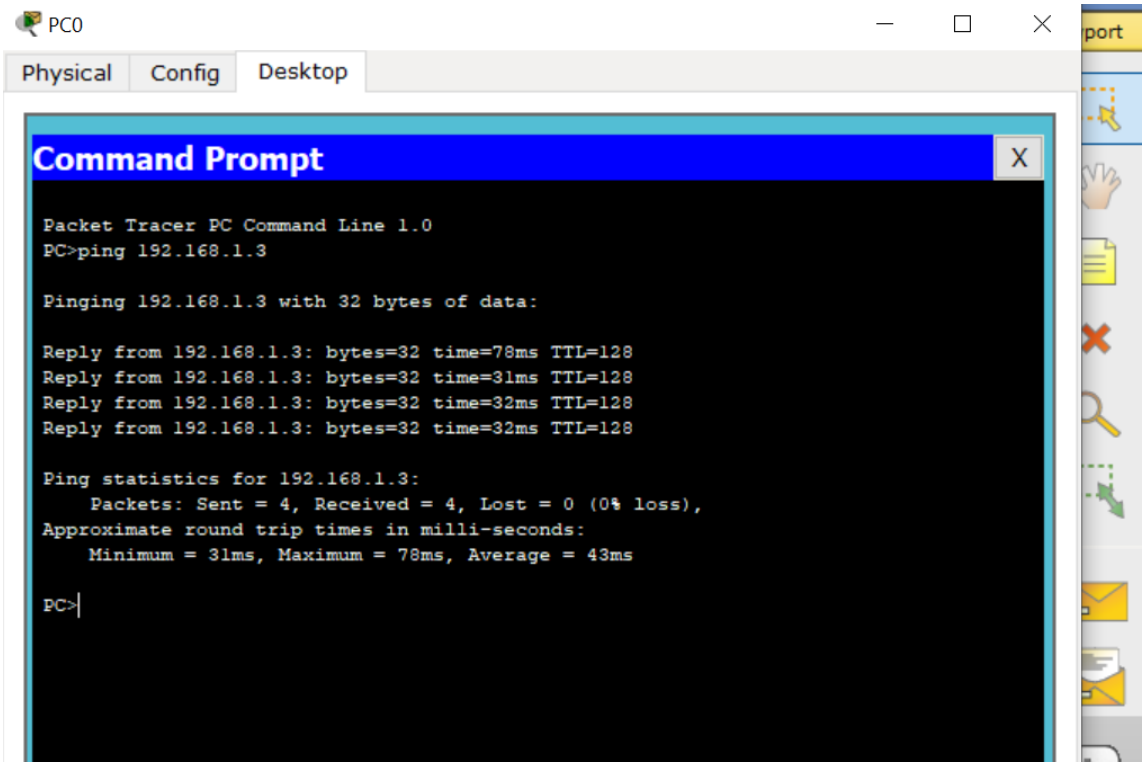
   Ans: A Cross-Over cable. i.e that is used to connect two same devices.

2. What was the output of ping command in Step 3 of Task 3? What happens if you unplug the network cable and ping the other workstation?

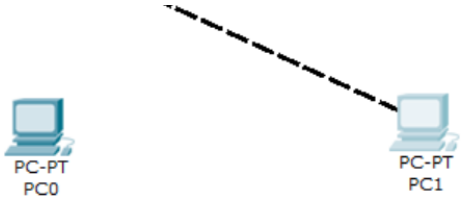
   Ans:
   Connection:



   Output of Ping Command:



   b. if we unplug and then ping:
   Connection:



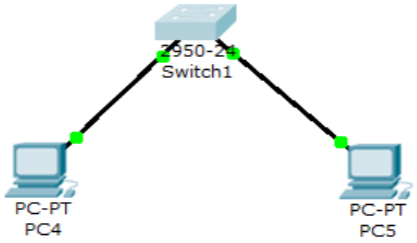
Ping Output: i.e Request Timed out message.

```
PC>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC>
```

3. What was the output of ping command in Task 4? What happens if you ping an address that is not connected to the network?

Ans:

Connection:

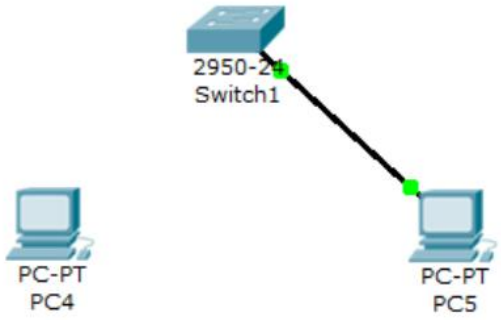


Ping Output:

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.1.3

Pinging 192.168.1.3 with 32 bytes of data:

Reply from 192.168.1.3: bytes=32 time=109ms TTL=128
Reply from 192.168.1.3: bytes=32 time=63ms TTL=128
Reply from 192.168.1.3: bytes=32 time=62ms TTL=128
Reply from 192.168.1.3: bytes=32 time=62ms TTL=128

Ping statistics for 192.168.1.3:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 62ms, Maximum = 109ms, Average = 74ms

PC>
```

Ping Output when a pc with certain ip is not over the network:

Connection:



Here the PC4(192.168.1.2) is not over the network so pinging it from PC5's command prompt will result in:

```
PC>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

PC>
```

i.e Request will be timed out.

4. What could prevent a ping from being sent between the workstations when they are directly connected?

   Ans: Using straight-over cable or assigning wrong ip-address to any of the workstations can prevent a ping from being sent between the workstations when they have a direct connection.

5. What could prevent the ping from being sent to the workstations when they are connected through the switch?

   Ans: There can be more than one reason that can prevent the ping being sent to the workstations when they are connected through a switch, few of them are given below:

   Connecting workstations to switch with cross-over cable
   Switch may be turned off.
   Switch can be faulty.

Port may be faulty.
Assigned wrong ip-addresses to the workstations.
Firewall might be turned on.