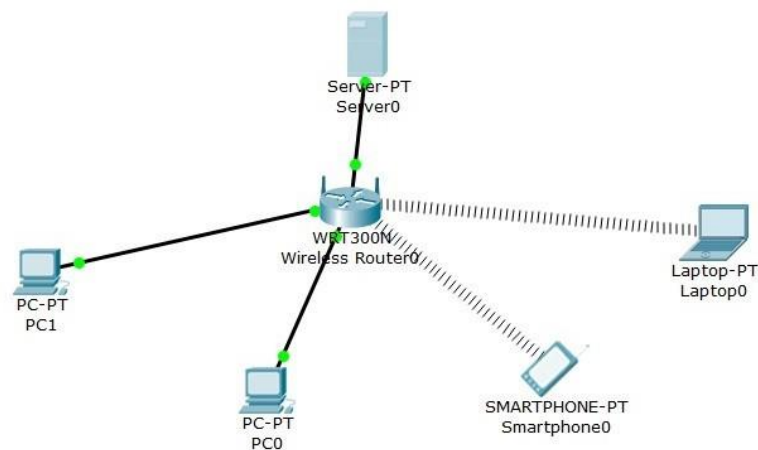


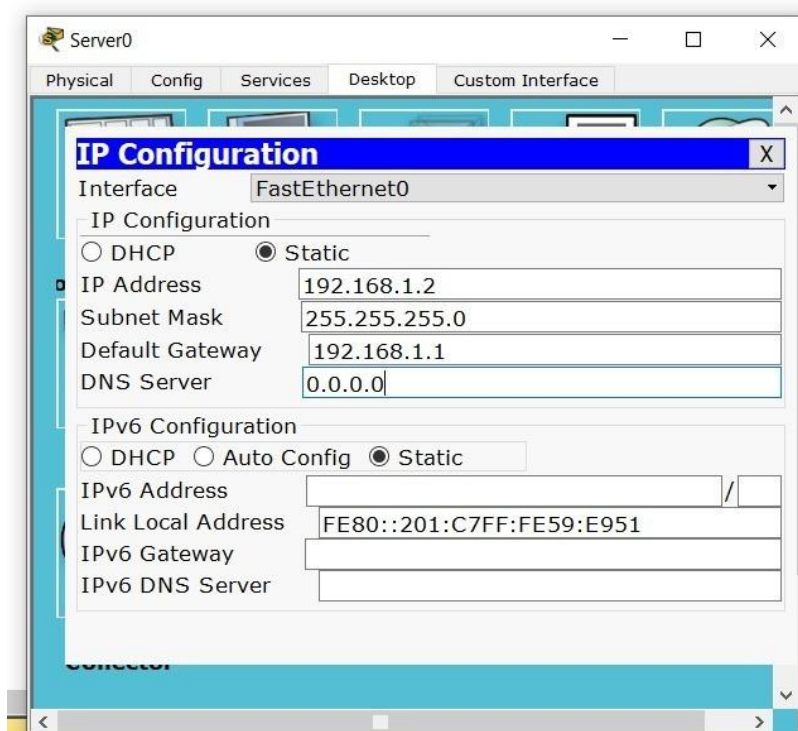
Practical No. 4

Aim: Using Packet Tracer, create a basic network of one server and two computers and two mobile / movable devices using appropriate network wire. And verify the connectivity

For the present case we use the following topology



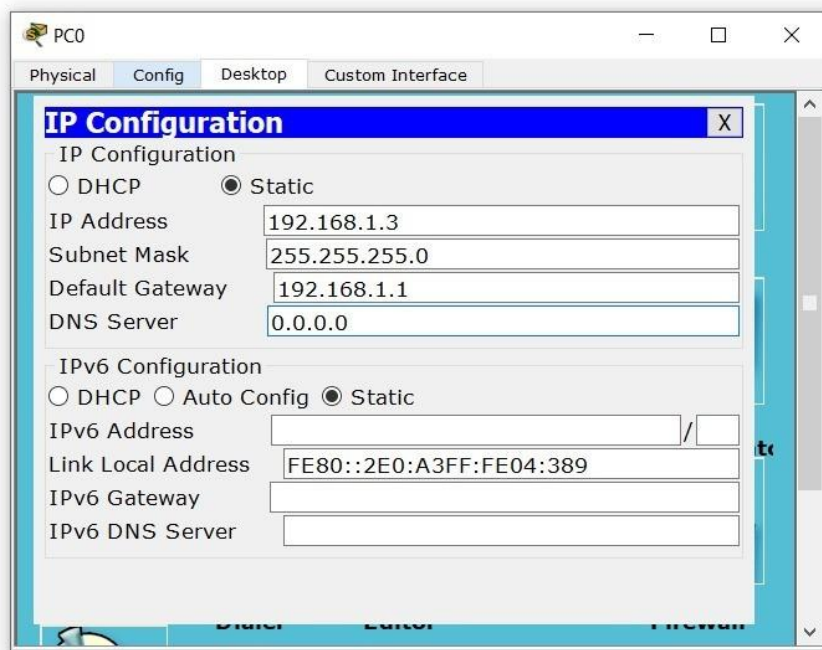
Configure the Server:



Name: Kaustubh Rane
Roll No.: CS23037

Computer Networks

Configure PC0:



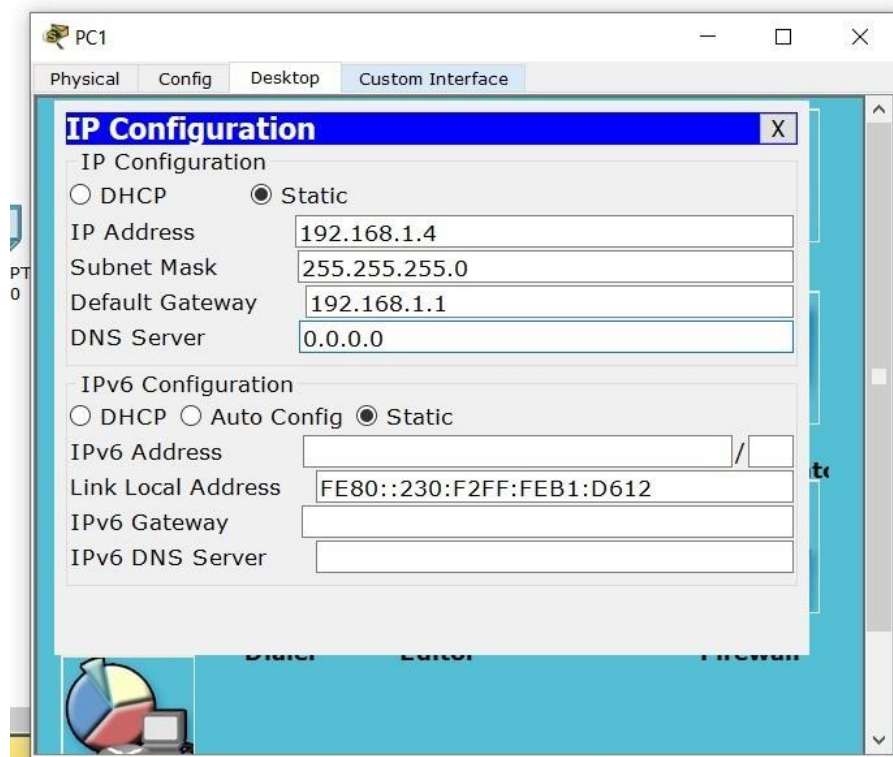
The screenshot shows the 'PC0' configuration window with the 'Config' tab selected. The 'IP Configuration' section is expanded, showing the following settings:

IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	192.168.1.3
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DNS Server	0.0.0.0

The 'IPv6 Configuration' section is also expanded, showing the following settings:

IPv6 Configuration		
<input type="radio"/> DHCP	<input type="radio"/> Auto Config	<input checked="" type="radio"/> Static
IPv6 Address		
Link Local Address	FE80::2E0:A3FF:FE04:389	
IPv6 Gateway		
IPv6 DNS Server		

Configure PC1:



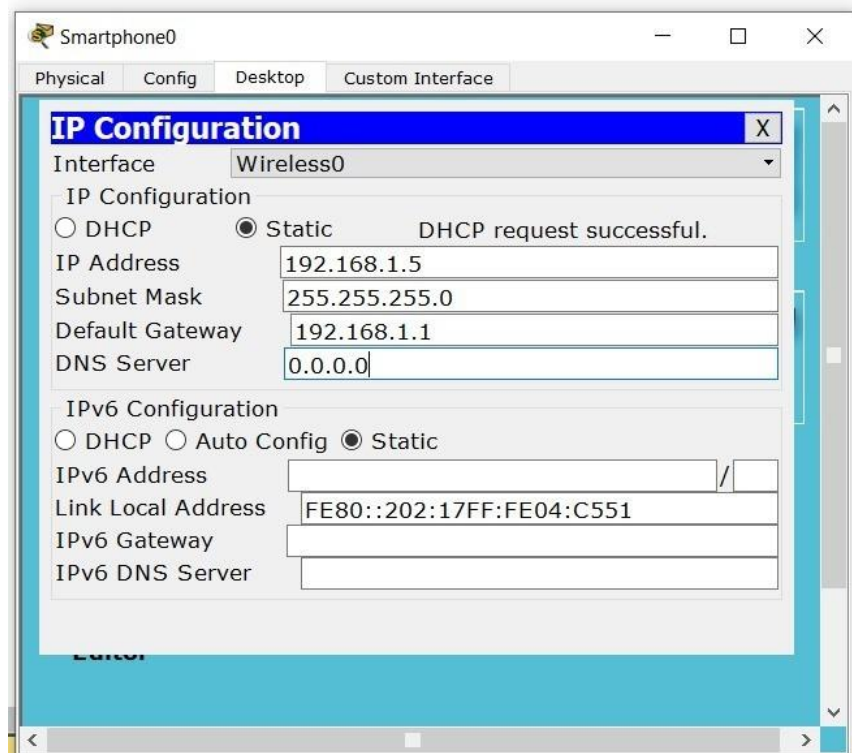
The screenshot shows the 'PC1' configuration window with the 'Config' tab selected. The 'IP Configuration' section is expanded, showing the following settings:

IP Configuration	
<input type="radio"/> DHCP	<input checked="" type="radio"/> Static
IP Address	192.168.1.4
Subnet Mask	255.255.255.0
Default Gateway	192.168.1.1
DNS Server	0.0.0.0

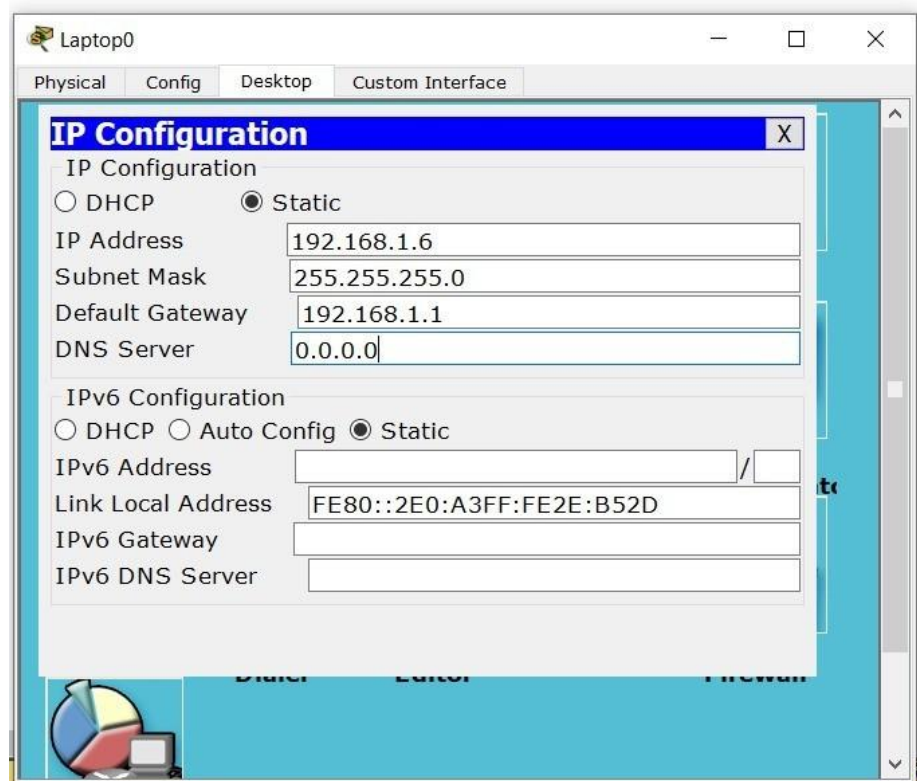
The 'IPv6 Configuration' section is also expanded, showing the following settings:

IPv6 Configuration		
<input type="radio"/> DHCP	<input type="radio"/> Auto Config	<input checked="" type="radio"/> Static
IPv6 Address		
Link Local Address	FE80::230:F2FF:FEB1:D612	
IPv6 Gateway		
IPv6 DNS Server		

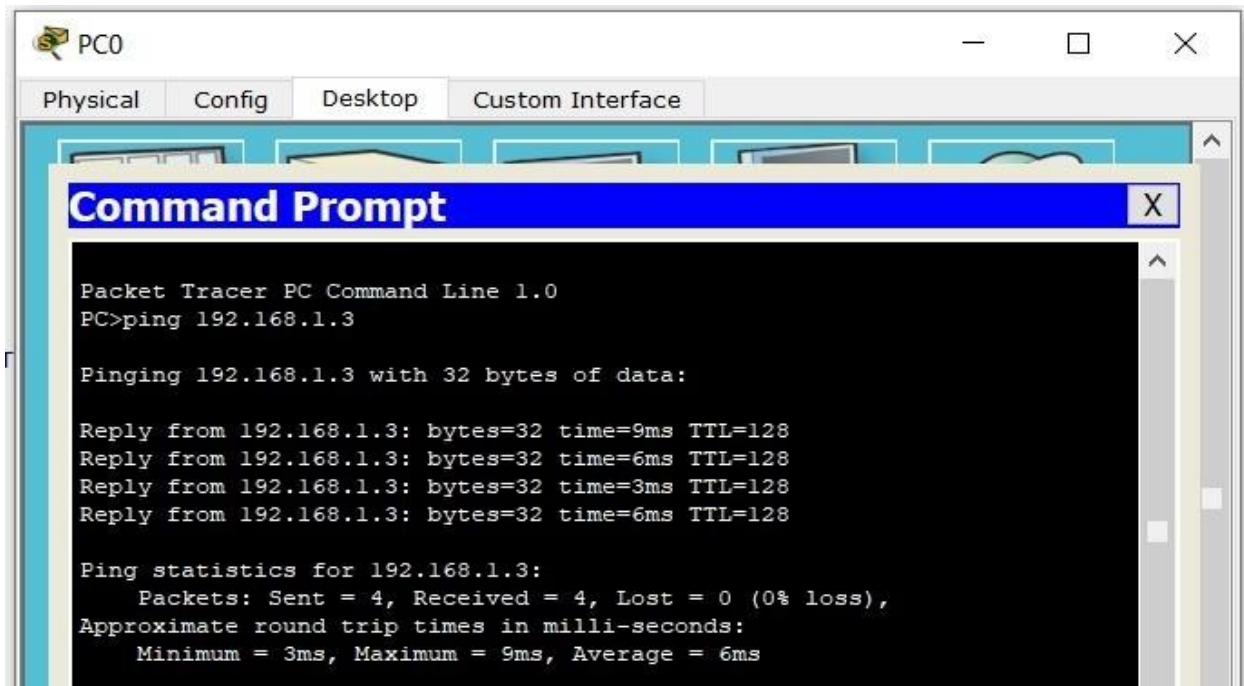
Configure Smartphone0:



Configure Laptop0:



Checking the connectivity (pinging laptop0 from PC0):



The screenshot shows a Packet Tracer PC0 window with tabs for Physical, Config, Desktop, and Custom Interface. The Desktop tab is active, displaying a Command Prompt window titled 'Command Prompt'. The Command Prompt shows the output of the command 'PC>ping 192.168.1.3'. The output indicates a successful ping with 32 bytes of data, showing four replies from 192.168.1.3 with varying round trip times (9ms, 6ms, 3ms, 6ms) and a TTL of 128. The ping statistics for 192.168.1.3 show 4 packets sent, 4 received, 0 lost (0% loss), and approximate round trip times in milliseconds: Minimum = 3ms, Maximum = 9ms, Average = 6ms.

```
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=9ms TTL=128
Reply from 192.168.1.3: bytes=32 time=6ms TTL=128
Reply from 192.168.1.3: bytes=32 time=3ms TTL=128
Reply from 192.168.1.3: bytes=32 time=6ms 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 = 3ms, Maximum = 9ms, Average = 6ms
```

Similarly, the ping message can be checked for all the devices

Result: Hence the Connectivity of the network has been verified.