

Experiment No. 03

Date 14.07.25

Roll No. A054

Aim :- Performing initial router configuration.

Theory :-

Configuring the router

- click on router, Under "Config" Tab in interface select "Gigabit Ethernet 0/0/0".
- Under IP configuration, give the IPv4 Address as 192.168.1.1 which the Default-Gateway Address.
- Press TAB, it should autocomplete the Subnet Mask Field, if it doesn't manually enter the subnet Field as 255.255.255.0
- Leave other properties as it is & select the Box for first property Port status as "On".
- The configuration tab looks like this :
- At this point, Router's LAN interface has been configured & after some time, interface will Green.

To test connection. Ping a PC to PC & Ping a PC to default gateway.

- Click any PC, go to desktop & open Command Prompt.
- Ping any other host in network by running command: `c:\> ping 192.168.1.101.`
- Ensure that ping is successfully by checking statistics in the end.
- A successful ping looks like this.
- Now ping the default gateway through any host.

192.168.1.1

Physical Config CU Attributes

- GLOBAL
- Settings
- Algorithm Settings
- ROUTING
- Static
- RIP
- SWITCHING
- VLAN Database
- INTERFACE
- GigabitEthernet0/0/0
- GigabitEthernet0/0/1
- GigabitEthernet0/0/2

GigabitEthernet0/0/0

Port Status On

Bandwidth 1000 Mbps 100 Mbps 10 Mbps Auto

Duplex Half Duplex Full Duplex Auto

MAC Address

IP Configuration

IPv4 Address

Subnet Mask

Tx Ring Limit

Equivalent IOS Commands

```

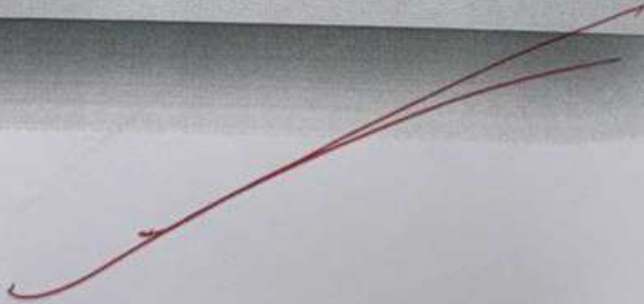
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface GigabitEthernet0/0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0/0, changed state to up

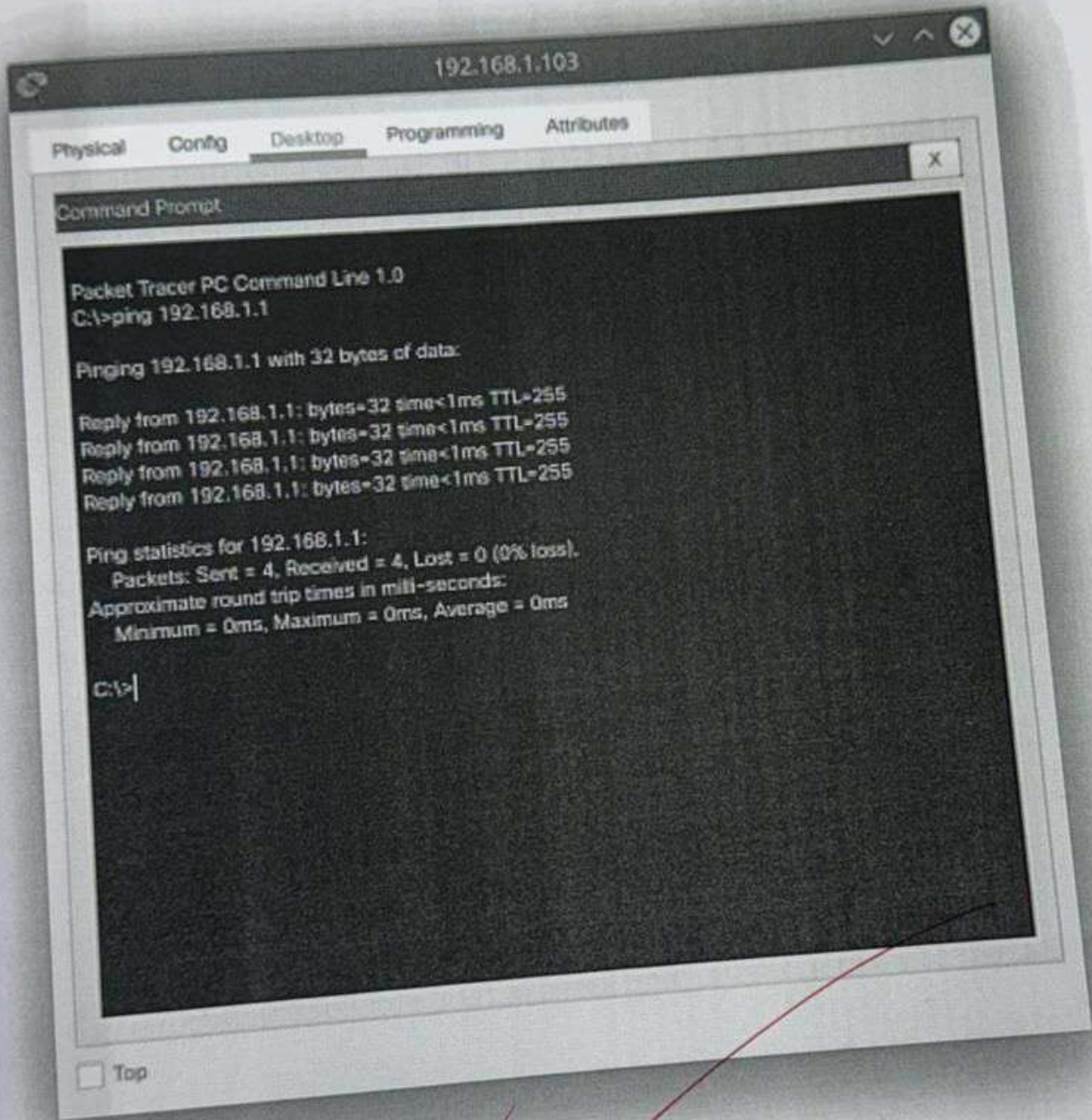
```

Top

ll

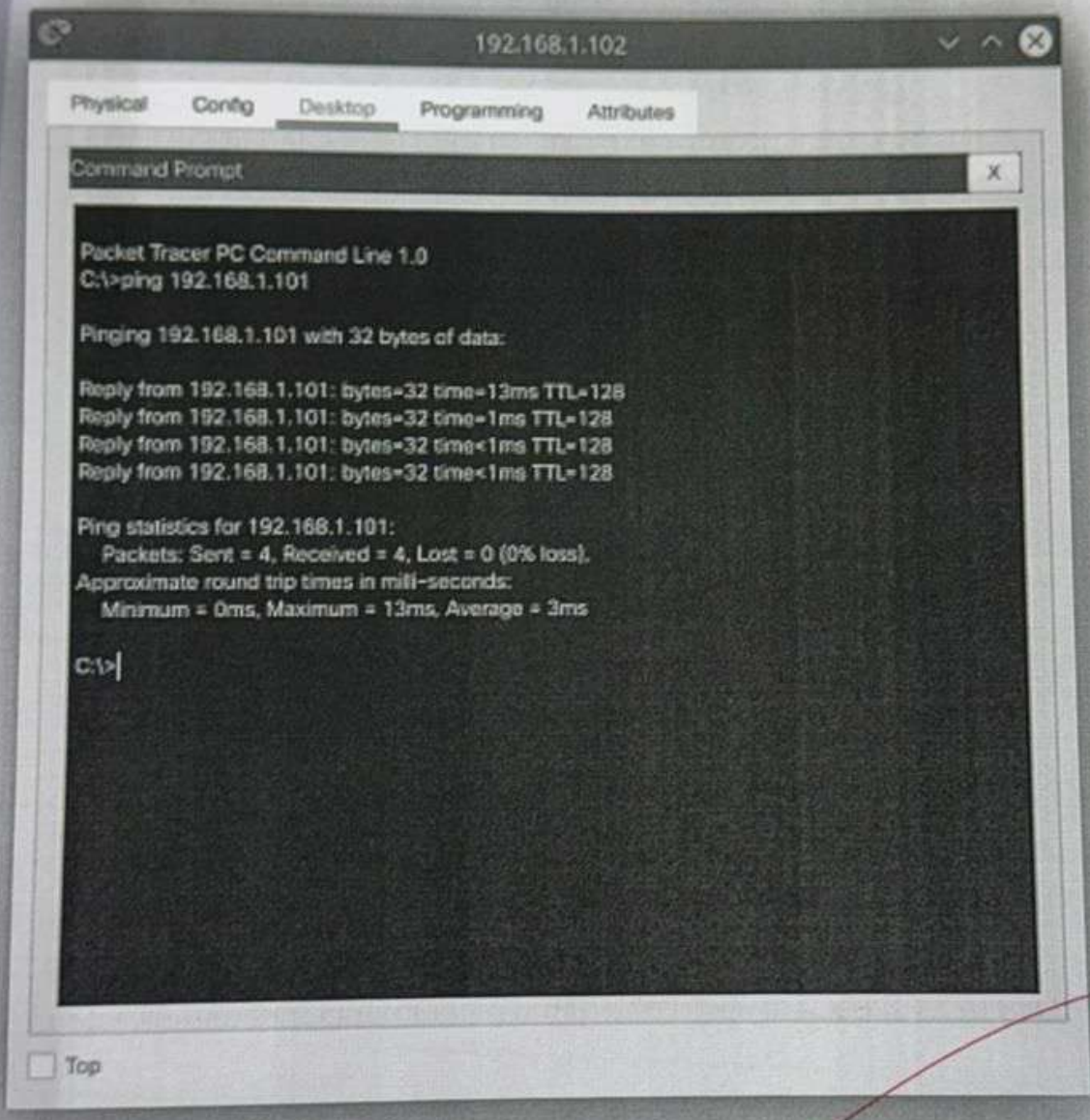
d





ll

d



- Click on host, open its command prompt & ping the default gateway using command.
e: |> ping . 168.1.1
- A successful ping looks like this:

A LAN has successfully wired & configured as well as tested by pinging a host.

conclusion
~~confi~~

:- Hence we have successfully configured a router.

~~22~~
23/1/23