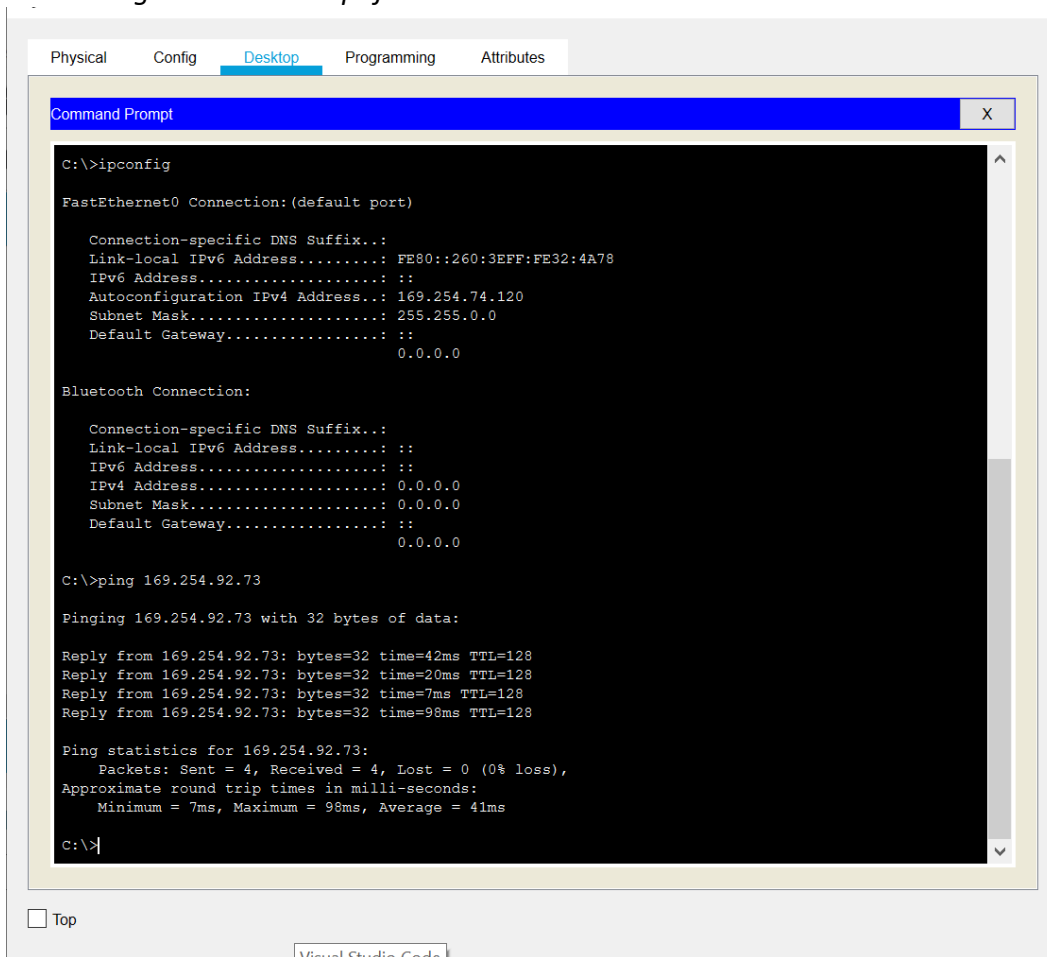


Homework 4 – Packet Tracer

- This is an individual assignment, and is worth 20 points.
- The due date is Friday, September 25 midnight.
- Submit the final outcome and *.pkt file.
- Follow usual naming convention.
- Copying and submitting someone else's work is strictly prohibited. **If caught, the students (giver and receiver) will receive zero on this assignment and also a 20 points penalty.**

Task 1. Complete all the Parts in the following file: *2.1.1.5 Packet Tracer - Create a Simple Network Using Packet Tracer.pdf*.



The screenshot shows the Packet Tracer interface with the 'Desktop' tab selected. A 'Command Prompt' window is open, displaying the following text:

```
C:\>ipconfig

FastEthernet0 Connection: (default port)

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address...: FE80::260:3EFF:FE32:4A78
    IPv6 Address...: ::
    Autoconfiguration IPv4 Address...: 169.254.74.120
    Subnet Mask...: 255.255.0.0
    Default Gateway...: ::
                                0.0.0.0

Bluetooth Connection:

    Connection-specific DNS Suffix...:
    Link-local IPv6 Address...: ::
    IPv6 Address...: ::
    IPv4 Address...: 0.0.0.0
    Subnet Mask...: 0.0.0.0
    Default Gateway...: ::
                                0.0.0.0

C:\>ping 169.254.92.73

Pinging 169.254.92.73 with 32 bytes of data:

Reply from 169.254.92.73: bytes=32 time=42ms TTL=128
Reply from 169.254.92.73: bytes=32 time=20ms TTL=128
Reply from 169.254.92.73: bytes=32 time=7ms TTL=128
Reply from 169.254.92.73: bytes=32 time=98ms TTL=128

Ping statistics for 169.254.92.73:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 7ms, Maximum = 98ms, Average = 41ms

C:\>
```

At the bottom of the window, there is a 'Top' button and a 'Visual Studio Code' icon.

```
C:\>ipconfig /release

IP Address.....: 0.0.0.0
Subnet Mask.....: 0.0.0.0
Default Gateway.....: 0.0.0.0
DNS Server.....: 0.0.0.0

C:\>ipconfig /renew

IP Address.....: 192.168.0.146
Subnet Mask.....: 255.255.255.0
Default Gateway.....: 192.168.0.1
DNS Server.....: 208.67.220.220

C:\>ping Cisco.com

Pinging 208.67.220.220 with 32 bytes of data:

Reply from 208.67.220.220: bytes=32 time=2ms TTL=127
Reply from 208.67.220.220: bytes=32 time=15ms TTL=127
Reply from 208.67.220.220: bytes=32 time=2ms TTL=127
Reply from 208.67.220.220: bytes=32 time=20ms TTL=127

Ping statistics for 208.67.220.220:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 2ms, Maximum = 20ms, Average = 9ms

C:\>|
```

Task 2. Change the name of the network devices.

```
Packet Tracer PC Command Line 1.0
C:\>ping 192.168.0.200

Pinging 192.168.0.200 with 32 bytes of data:

Reply from 192.168.0.200: bytes=32 time=8ms TTL=128
Reply from 192.168.0.200: bytes=32 time=1ms TTL=128
Reply from 192.168.0.200: bytes=32 time=24ms TTL=128
Reply from 192.168.0.200: bytes=32 time=84ms TTL=128

Ping statistics for 192.168.0.200:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 84ms, Average = 29ms

C:\>|
```

```

C:\>ipconfig /renew

IP Address.....: 192.168.0.100
Subnet Mask.....: 255.255.255.0
Default Gateway...: 192.168.0.1
DNS Server.....: 208.67.220.220

C:\>ping Wantland.com

Pinging 208.67.220.220 with 32 bytes of data:

Reply from 208.67.220.220: bytes=32 time=17ms TTL=127
Reply from 208.67.220.220: bytes=32 time=10ms TTL=127
Reply from 208.67.220.220: bytes=32 time=31ms TTL=127
Reply from 208.67.220.220: bytes=32 time=18ms TTL=127

Ping statistics for 208.67.220.220:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 10ms, Maximum = 31ms, Average = 19ms

C:\>

```

Task 3. Complete Parts 1 and 2 (not 3) in the following file: *3.1.1.3 Packet Tracer - Explore Network Functionality Using PDUs.pdf*.

The screenshot shows the Cisco Packet Tracer interface. On the left, a network topology is visible with a PC-PT, a Wireless Router, and a Laptop-PT. The main window displays the 'PDU Information at Device: PC' window, which is currently showing the 'Outbound PDU Details' tab. The 'In Layers' and 'Out Layers' sections are visible, showing the layers of the network stack. The 'Event List' window on the right shows a list of events, including ICMP Echo Request and Reply, and ARP requests and replies. The 'Play Controls' window at the bottom shows the simulation is running, with a time of 00:07:43.297.

Task 4. Submit your *.pkt file.