
VoIP Task

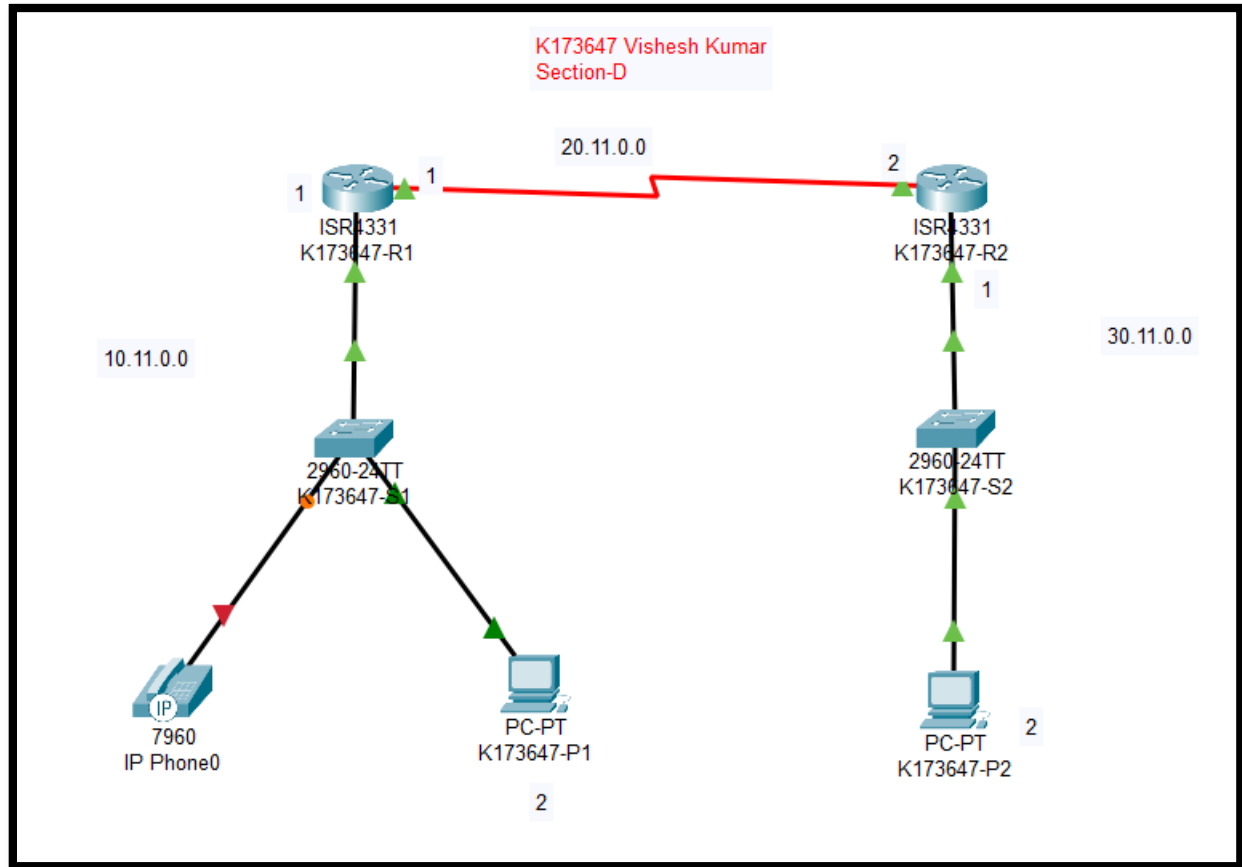
Name: Vishesh Kumar

ID: K173647

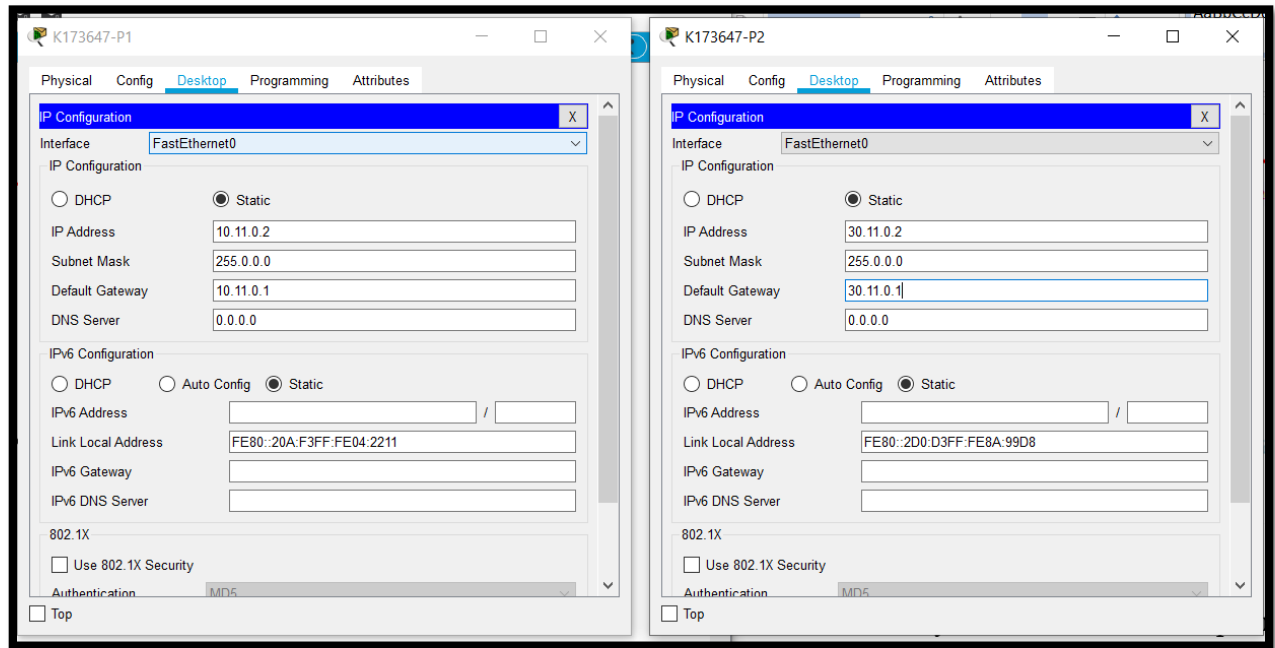
Section: D

Question No. 1

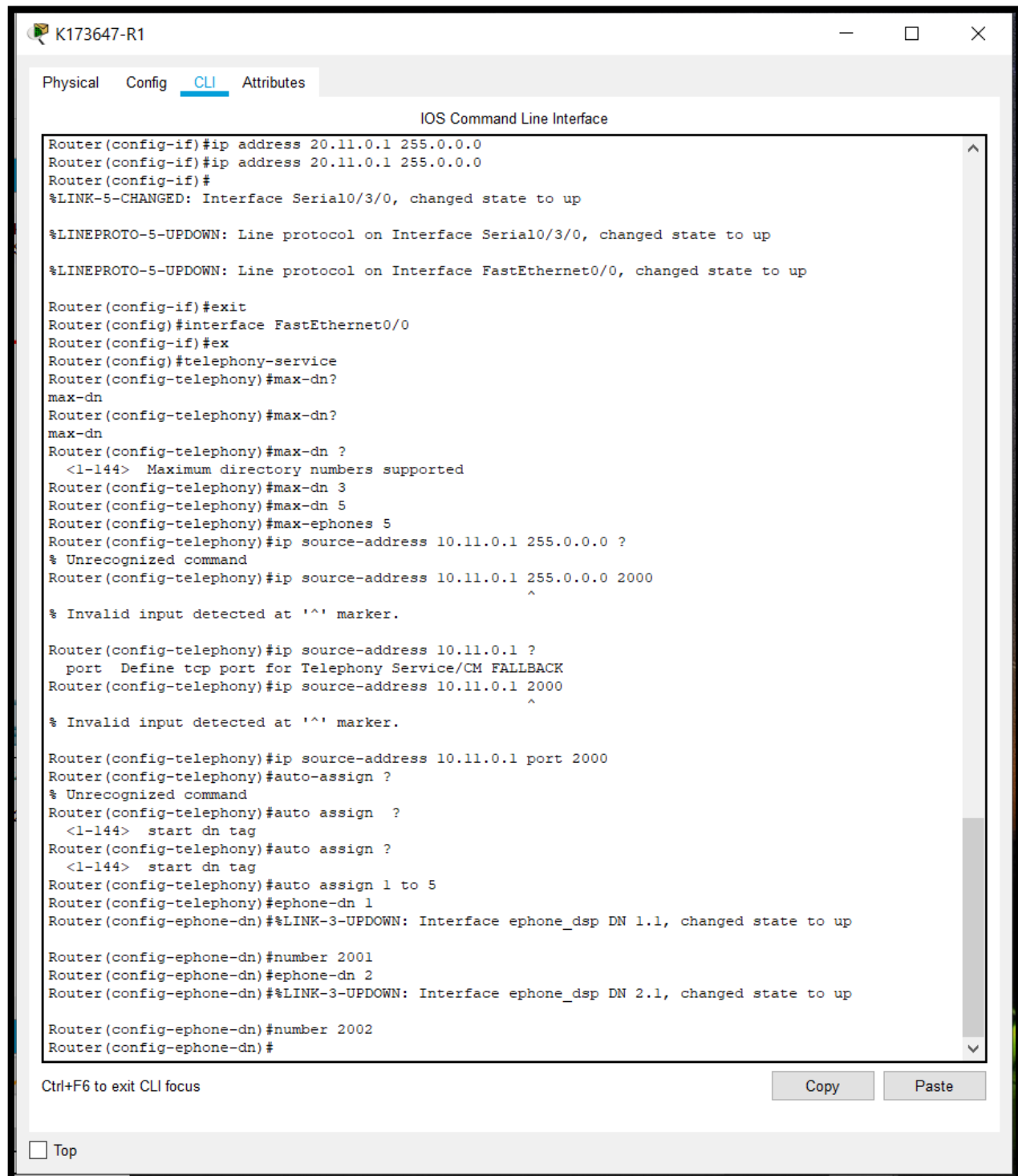
Topology:



Assigning IP's to PCs:



Configuring Router 1:



The screenshot shows a window titled "K173647-R1" with tabs for "Physical", "Config", "CLI", and "Attributes". The "CLI" tab is active, displaying the "IOS Command Line Interface". The interface shows a series of commands and their outputs for configuring a router. The commands include setting IP addresses, enabling interfaces, configuring telephony services, and setting up ephone-dn numbers. The output shows the state of the interfaces and the results of the commands.

```
Router(config-if)#ip address 20.11.0.1 255.0.0.0
Router(config-if)#ip address 20.11.0.1 255.0.0.0
Router(config-if)#
%LINK-5-CHANGED: Interface Serial0/3/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/3/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#exit
Router(config)#interface FastEthernet0/0
Router(config-if)#ex
Router(config)#telephony-service
Router(config-telephony)#max-dn?
max-dn
Router(config-telephony)#max-dn?
max-dn
Router(config-telephony)#max-dn ?
<1-144> Maximum directory numbers supported
Router(config-telephony)#max-dn 3
Router(config-telephony)#max-dn 5
Router(config-telephony)#max-ephones 5
Router(config-telephony)#ip source-address 10.11.0.1 255.0.0.0 ?
% Unrecognized command
Router(config-telephony)#ip source-address 10.11.0.1 255.0.0.0 2000
^
% Invalid input detected at '^' marker.

Router(config-telephony)#ip source-address 10.11.0.1 ?
port Define tcp port for Telephony Service/CM FALLBACK
Router(config-telephony)#ip source-address 10.11.0.1 2000
^
% Invalid input detected at '^' marker.

Router(config-telephony)#ip source-address 10.11.0.1 port 2000
Router(config-telephony)#auto-assign ?
% Unrecognized command
Router(config-telephony)#auto assign ?
<1-144> start dn tag
Router(config-telephony)#auto assign ?
<1-144> start dn tag
Router(config-telephony)#auto assign 1 to 5
Router(config-telephony)#ephone-dn 1
Router(config-ephone-dn)%%LINK-3-UPDOWN: Interface ephone_dsp DN 1.1, changed state to up

Router(config-ephone-dn)#number 2001
Router(config-ephone-dn)#ephone-dn 2
Router(config-ephone-dn)%%LINK-3-UPDOWN: Interface ephone_dsp DN 2.1, changed state to up

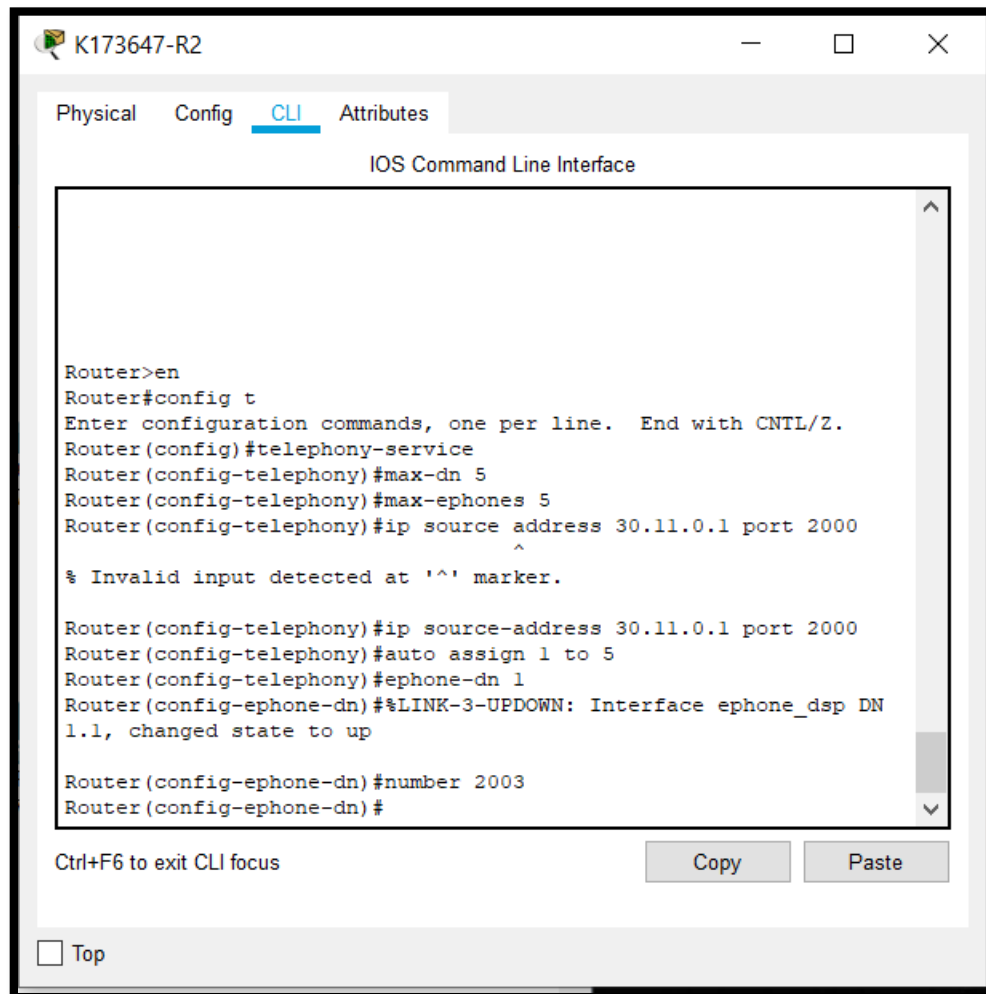
Router(config-ephone-dn)#number 2002
Router(config-ephone-dn)#
```

Ctrl+F6 to exit CLI focus

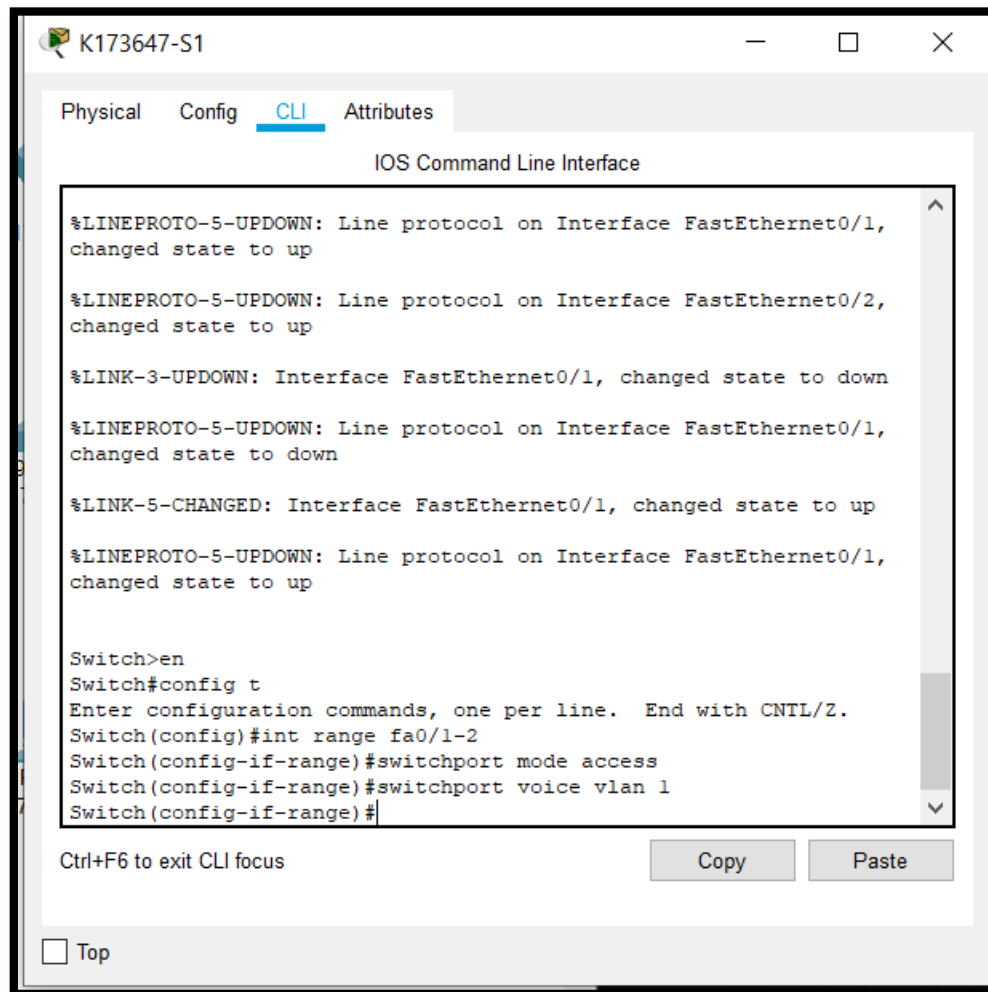
Copy Paste

☐ Top

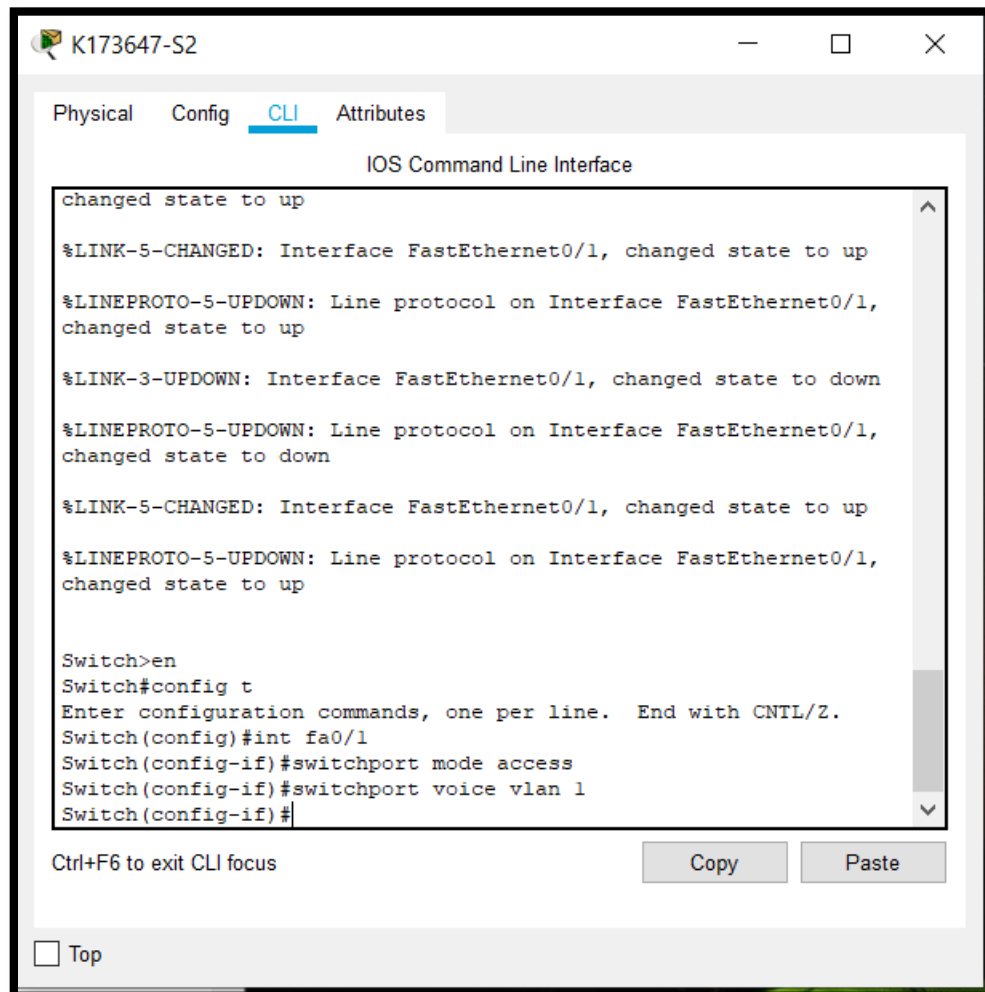
Configuring Router 2:



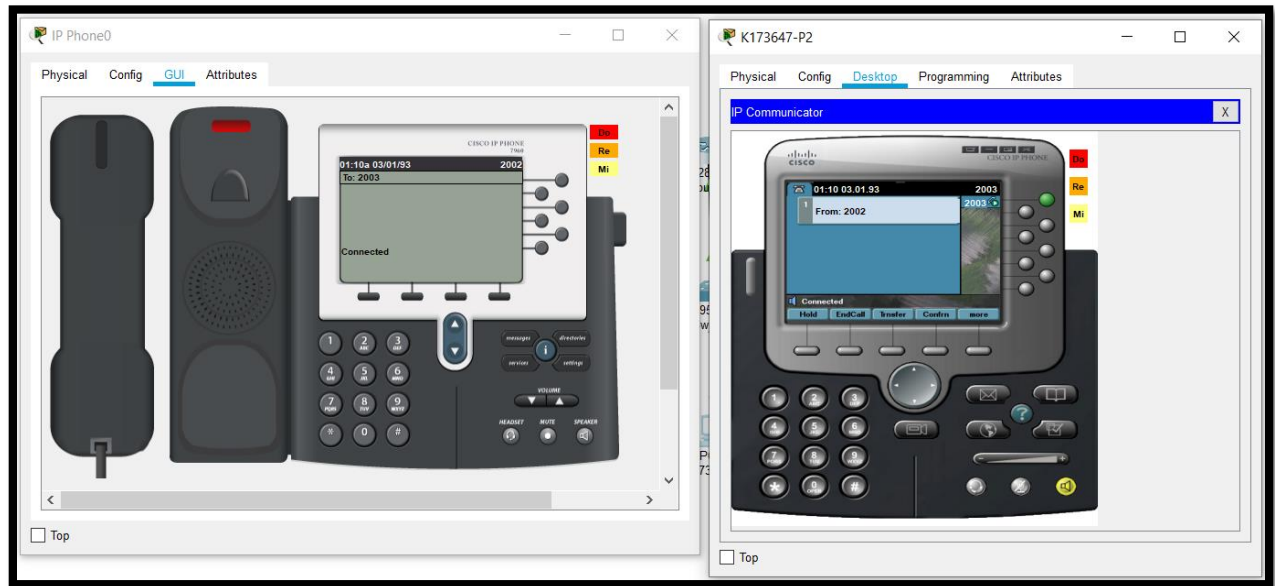
Configuring Switch 1:



Configuring Switch 2:

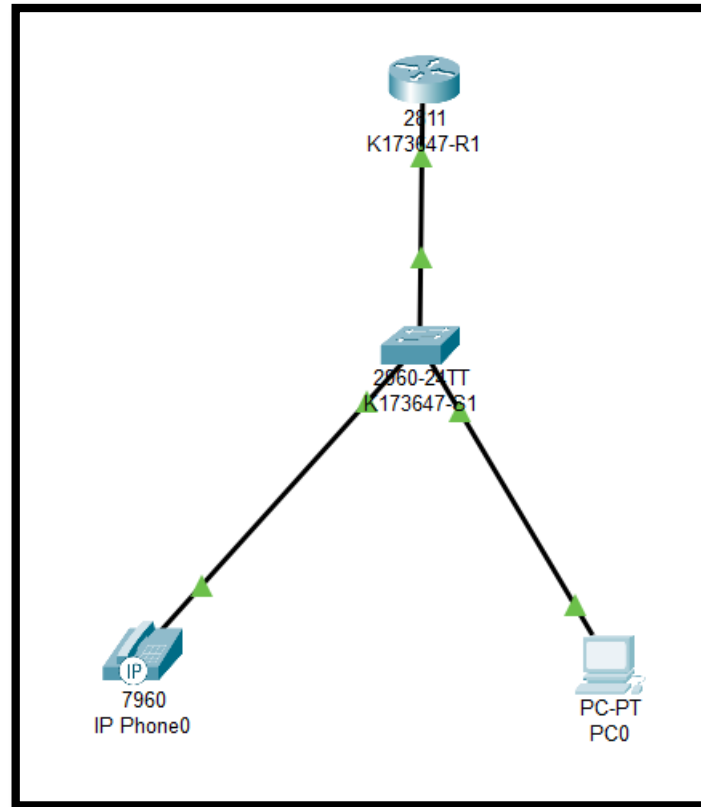


Call from IP phone to PC2:



Question No. 2

Topology:



Configuring DHCP in Router:

```
Router>en
Router#config t
Enter configuration commands, one per line.  End with CNTL/Z.
Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if)#ip address 192.168.1.1 255.255.255.0
Router(config-if)#ip dhcp pool voice
Router(dhcp-config)#network 192.168.1.1 255.255.255.0
Router(dhcp-config)#default-router 192.168.1.1
Router(dhcp-config)#option 150 ip 192.168.1.1
Router(dhcp-config)#ex
Router(config)#no shut
      ^
% Invalid input detected at '^' marker.

Router(config)#no shutdown
      ^
% Invalid input detected at '^' marker.

Router(config)#
Router(config)#interface FastEthernet0/0
Router(config-if)#no shutdown
```

Enabling Telephony-Service in Router:

```
Router(config)#telephony-service
Router(config-telephony)#max-dn 2
Router(config-telephony)#max-ephones 2
Router(config-telephony)#ip source address 192.168.1.1 port 2000
      ^
% Invalid input detected at '^' marker.

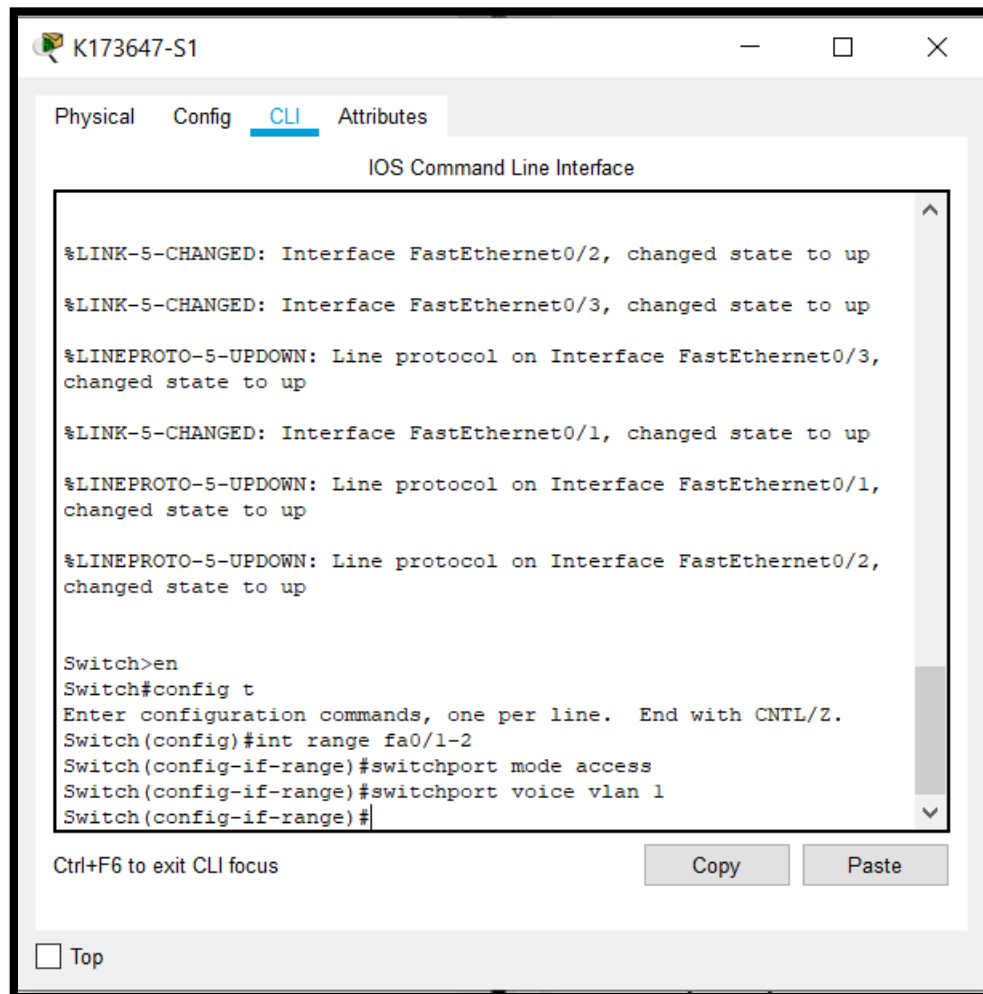
Router(config-telephony)#ip source-address 192.168.1.1 port 2000
Router(config-telephony)#auto assign 1 to 2
Router(config-telephony)#phone-dn 1
      ^
% Invalid input detected at '^' marker.

Router(config-telephony)#ephone-dn 1
Router(config-ephone-dn)##LINK-3-UPDOWN: Interface ephone_dsp DN 1.1, changed
state to up

Router(config-ephone-dn)#number 1000
Router(config-ephone-dn)#ephone-dn 2
Router(config-ephone-dn)##LINK-3-UPDOWN: Interface ephone_dsp DN 2.1, changed
state to up

Router(config-ephone-dn)#number 2000
Router(config-ephone-dn)#|
```

Enabling VLAN in Switch:



Call from IP Phone0 to PC:

