

Open packet tracer and draw the following network design, use the same device models (router: 1941,switch: 2960) and connect the same ports (ex: fa0/1,Gig0/1,etc...) as shown in picture.

Using PC5 connected to console of the router:

- 1. Configure on the router:
 - a. hostname
 - b. Configure a MOTD (message of the day)
 - c. Configure the privileged exec password
 - d. Configure the console password
 - e. Configure the virtual line password
 - f. Encrypt all passwords.
 - g. Configure a description on interface g0/0 on router1.(check show run and see int g0/0)
- 2. Configure both router's interfaces with the appropriate IP address.
- 3. Configure all the host pc with the appropriate IP addresses.
- 4. What command saves the changes you configured on the router?
- 5. Use the telnet command from pc1 to remotely access the router and change the hostname of the router
- 6. Now try to use the ping command from:
 - a. pc1 to its default gate way
 - b. pc1 to b pc2
- 7. Now try to use the ping command from pc1 to any of the pcs in network2 .Is there a reply ? Why? (hint check routing table of the router)
- 8. Use traceroute command from pc1 to pc4 (tracert).

Hints:

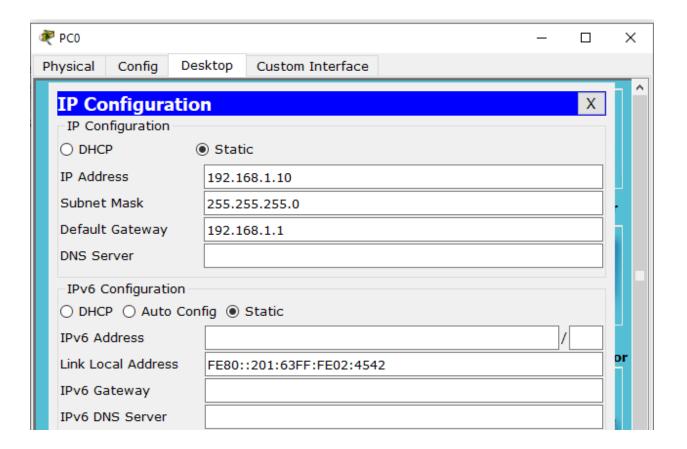
```
router>ena
router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
router(config)#hostname I3304
I3304(config)#ena pass cisco
I3304(config)#line console 0
I3304(config-line)#password cisco
I3304(config-line)#login
I3304(config-line)#line vty 0 4
I3304(config-line)#password cisco
I3304(config-line)#password cisco
I3304(config-line)#password cisco
I3304(config-line)#login
```

To configure only encrypted privileged password

Or to encrypt all passwords

```
I3304(config-if) #ena secret ciscol
I3304(config) #service password
I3304(config) #service password-encryption
I3304(config) #^Z
I3304#
%SYS-5-CONFIG_I: Configured from console by console
I3304#show run
```

```
I3304#conf t
Enter configuration commands, one per line. End with CNTL/Z.
I3304(config)#int g0/0
I3304(config-if) #description network 1 interface
I3304#conf t
Enter configuration commands, one per line. End with CNTL/Z.
I3304(config) #banner motd #welcome to router I3304#
I3304(config)#int g0/0
I3304(config-if) #no shut
I3304(config-if) #ip address 192.168.1.1 255.255.255.0
I3304(config-if)#int g0/1
I3304(config-if) #no shutdown
I3304(config-if) #ip address 192.168.2.1 255.255.255.0
I3304(config-if)#^Z
%SYS-5-CONFIG I: Configured from console by console
I3304#copy run start
Destination filename [startup-config]?
Building configuration...
[OK]
```



Command Prompt

```
Packet Tracer PC Command Line 1.0
PC>ping 192.168.1.20
Pinging 192.168.1.20 with 32 bytes of data:
Reply from 192.168.1.20: bytes=32 time=31ms TTL=128
Reply from 192.168.1.20: bytes=32 time=0ms TTL=128
Reply from 192.168.1.20: bytes=32 time=3ms TTL=128
Reply from 192.168.1.20: bytes=32 time=0ms TTL=128
Ping statistics for 192.168.1.20:
   Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
   Minimum = 0ms, Maximum = 31ms, Average = 8ms
PC>tracert 192.168.2.20
Tracing route to 192.168.2.20 over a maximum of 30 hops:
               0 ms 1 ms
13 ms 0 ms
  1 68 ms
               0 ms
                                   192.168.1.1
                                   192.168.2.20
Trace complete.
PC>telnet 192.168.1.1
Trying 192.168.1.1 ...Openwelcome to router I3304
User Access Verification
Password:
```