Rymbayeva Anelya, 2 course, Lab1 – IT Infrastructure and Networks

1. Click S1 and then click the CLI tab. Enter the correct command to configure the hostname as S1.

```
Switch>enable
Switch#config
Switch#configure ter
Switch#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
Switch(config)#hostname S1
S1(config)#
```

2. Use cisco for the console password.

```
S1(config)#line console 0
S1(config-line)#password cisco
S1(config-line)#login
S1(config-line)#exit
S1(config)#
```

3. Use class for the privileged EXEC mode password.

```
S1(config-line)#exit
S1(config)#enable secret class
S1(config)#
```

4. How can you verify that both passwords were configured correctly? Use an appropriate banner text to warn unauthorized access. The following text is an example: "Authorizes access only. Violators will be prosecuted to the full extent of the law."

```
S1>enable
Password:
S1#configure ter
S1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
S1(config)#banner motd "Authorized access only. Violators will be prosecuted
to the full extent of the law."
S1(config)#
S1#
%SYS-5-CONFIG_I: Configured from console by console
```

5. Which command do you issue to accomplish this step?

```
S1#copy runn
S1#copy running-config start
S1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
S1#
```

6. Click PC1, and then click the Desktop tab. Click IP Configuration. In the Addressing Table above, you can see that the IP address for PC1 is supposed to be 192.168.1.1 and the subnet mask 255.255.255.0. Enter this information for PC in the IP Configuration window. Repeat steps for PC2.
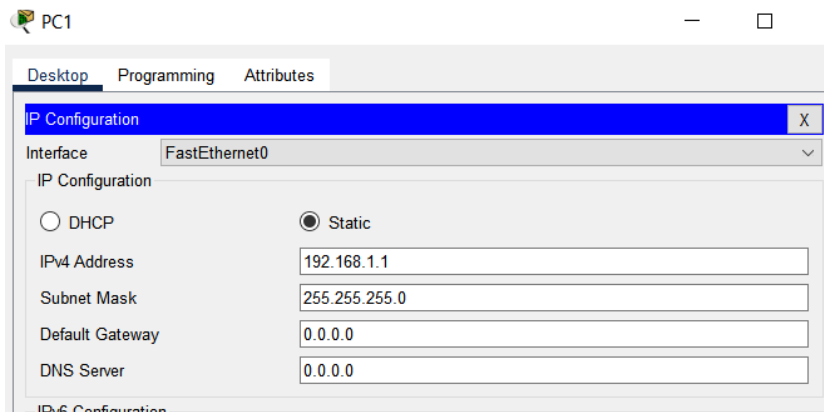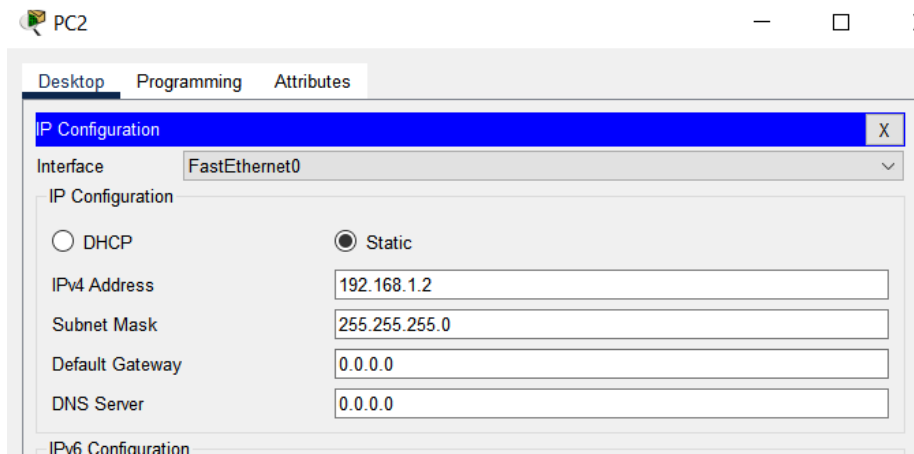
7. Click PC1. Close the IP Configuration window if it is still open. In the Desktop tab, click Command Prompt. Type the **ping** command and the IP address for S1, and press **Enter**.
Answer: It should not be successful because the switches have not been configured with an IP address.

```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 192.168.1.253

Pinging 192.168.1.253 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.1.253:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>
```

8. Switches can be used without any configurations. Switches forward information from one port to another based on Media Access Control (MAC) addresses. An IP address is required to connect to a switch remotely. The switch is managed through VLAN1 by default. Why do you enter the no shutdown command?

```
S1#configure ter
S1#configure terminal
Enter configuration commands, one per line.  End with CNTL/Z.
S1(config)#interface vlan
% Incomplete command.
S1(config)#inter
S1(config)#interface vlan
S1(config)#interface vlan 1
S1(config-if)#ip address 192.168.1.253 255.255.255.0
S1(config-if)#no shutdown

S1(config-if)#
%LINK-5-CHANGED: Interface Vlan1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1, changed state to up

S1(config-if)#
S1(config-if)#exit
S1(config)#
```

The no shutdown command administratively enables the interface to an active state.

9. Verify the IP address configuration on S1.

```
S1#show ip interface brief
Interface              IP-Address      OK? Method Status
Protocol
FastEthernet0/1        unassigned      YES manual up              up
FastEthernet0/2        unassigned      YES manual up              up
FastEthernet0/3        unassigned      YES manual down            down
FastEthernet0/4        unassigned      YES manual down            down
FastEthernet0/5        unassigned      YES manual down            down
FastEthernet0/6        unassigned      YES manual down            down
FastEthernet0/7        unassigned      YES manual down            down
FastEthernet0/8        unassigned      YES manual down            down
FastEthernet0/9        unassigned      YES manual down            down
FastEthernet0/10       unassigned      YES manual down            down
FastEthernet0/11       unassigned      YES manual down            down
FastEthernet0/12       unassigned      YES manual down            down
FastEthernet0/13       unassigned      YES manual down            down
FastEthernet0/14       unassigned      YES manual down            down
FastEthernet0/15       unassigned      YES manual down            down
FastEthernet0/16       unassigned      YES manual down            down
FastEthernet0/17       unassigned      YES manual down            down
FastEthernet0/18       unassigned      YES manual down            down
FastEthernet0/19       unassigned      YES manual down            down
FastEthernet0/20       unassigned      YES manual down            down
FastEthernet0/21       unassigned      YES manual down            down
 --More--
```

10. Saving the configuration

```
S1#copy run
S1#copy running-config start
S1#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
S1#
```

11. Verify the IP address configuration on S2.

```
S2#show ip interface brief
Interface              IP-Address      OK? Method Status
Protocol
FastEthernet0/1        unassigned      YES manual up              up
FastEthernet0/2        unassigned      YES manual up              up
FastEthernet0/3        unassigned      YES manual down            down
FastEthernet0/4        unassigned      YES manual down            down
FastEthernet0/5        unassigned      YES manual down            down
FastEthernet0/6        unassigned      YES manual down            down
FastEthernet0/7        unassigned      YES manual down            down
FastEthernet0/8        unassigned      YES manual down            down
FastEthernet0/9        unassigned      YES manual down            down
FastEthernet0/10       unassigned      YES manual down            down
FastEthernet0/11       unassigned      YES manual down            down
FastEthernet0/12       unassigned      YES manual down            down
FastEthernet0/13       unassigned      YES manual down            down
FastEthernet0/14       unassigned      YES manual down            down
FastEthernet0/15       unassigned      YES manual down            down
FastEthernet0/16       unassigned      YES manual down            down
FastEthernet0/17       unassigned      YES manual down            down
FastEthernet0/18       unassigned      YES manual down            down
FastEthernet0/19       unassigned      YES manual down            down
FastEthernet0/20       unassigned      YES manual down            down
FastEthernet0/21       unassigned      YES manual down            down
 --More-- |
```

12. Saving the configuration

```
S2#copy running-config atart
S2#copy running-config atar
S2#copy running-config star
S2#copy running-config startup-config
Destination filename [startup-config]?
Building configuration...
[OK]
S2#
```

13. Which command is used to save the configuration file in RAM to NVRAM?
    "copy running-config startup-config command"

14. Click PC1, and then click the Desktop tab. Open the Command Prompt.
    a. Ping the IP address for PC2.
    b. Ping the IP address for S1.

c. Ping the IP address for S2.

```
C:\>ping 192.168.1.2

Pinging 192.168.1.2 with 32 bytes of data:

Reply from 192.168.1.2: bytes=32 time=1ms TTL=128
Reply from 192.168.1.2: bytes=32 time=13ms TTL=128
Reply from 192.168.1.2: bytes=32 time=1ms TTL=128
Reply from 192.168.1.2: bytes=32 time=10ms TTL=128

Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 1ms, Maximum = 13ms, Average = 6ms

C:\>
```

```
S1>ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
.!!!!
Success rate is 80 percent (4/5), round-trip min/avg/max = 0/0/0 ms

S1>
```