

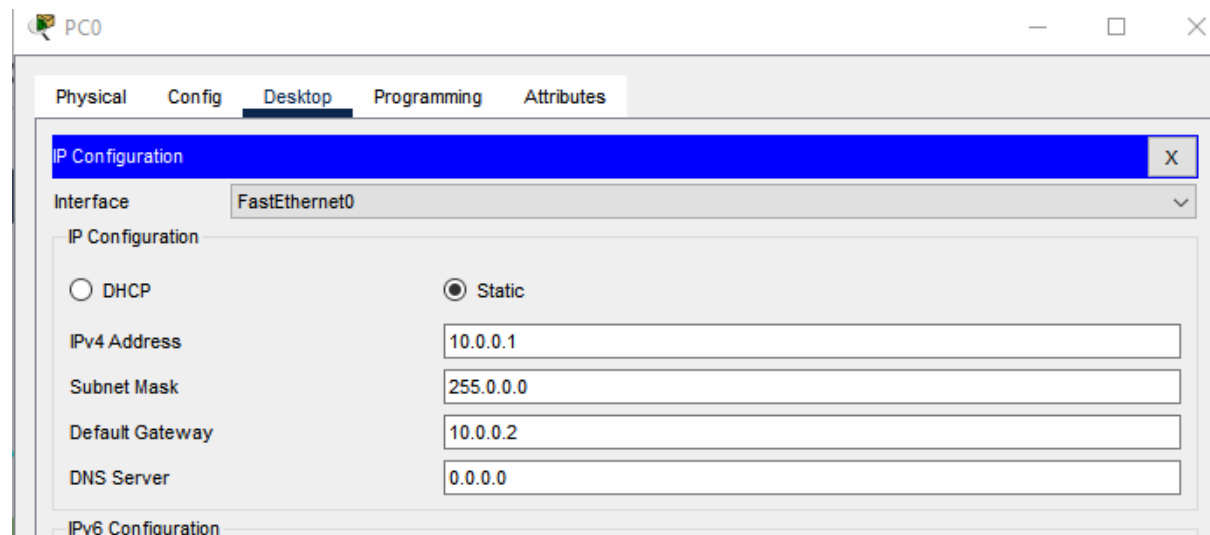
## Task 10(b)

10 b) Configure a remote login using SSH and Telnet.

**Telnet:**

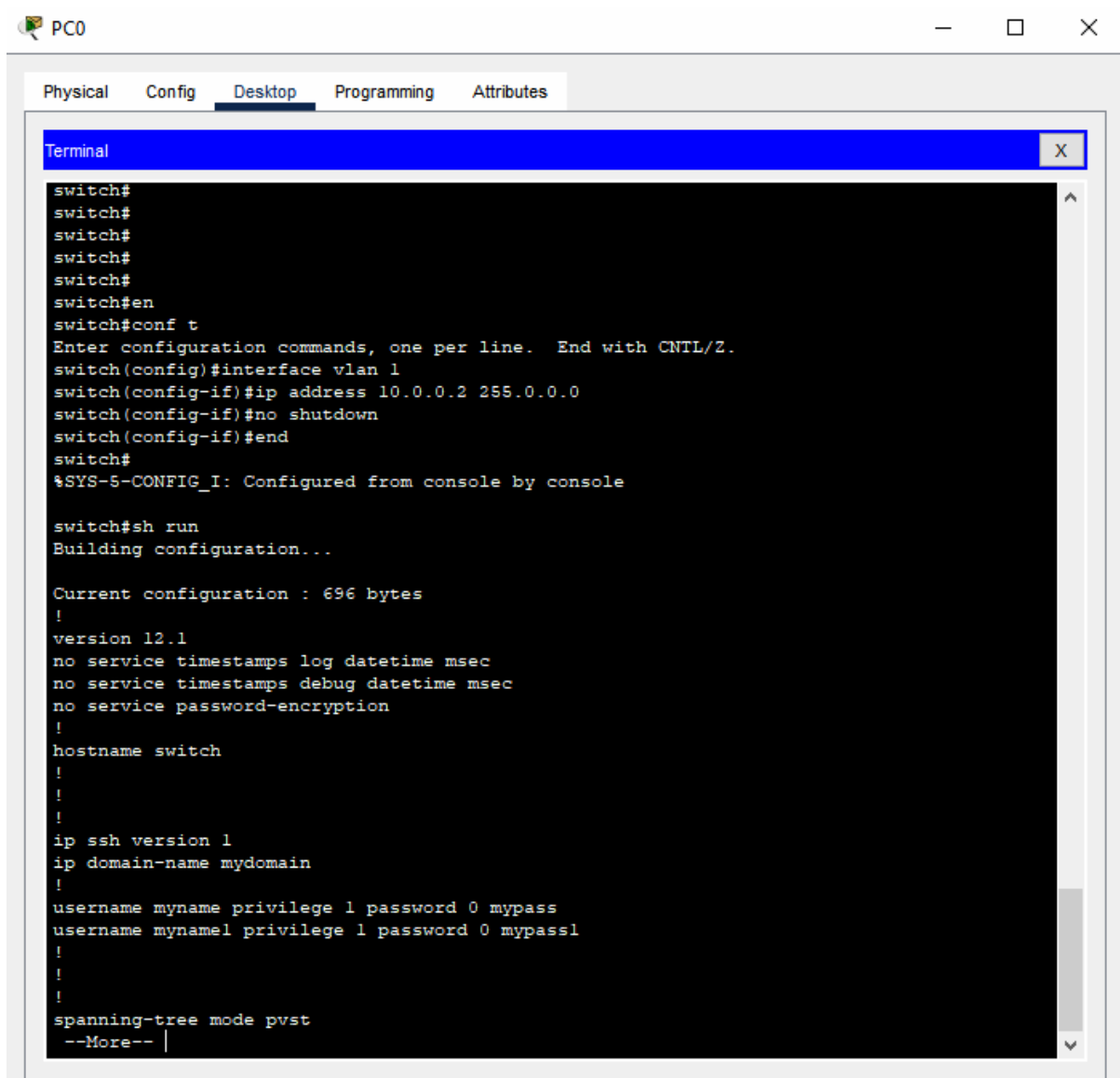


**First connect the console cable from PC0 RS232 port to Switch console port.**



**From PC0**

**Go to terminal**



The screenshot shows a PC0 window with a terminal open. The terminal displays a series of commands entered at a switch prompt, followed by the output of the 'show run' command. The configuration includes setting the interface to VLAN 1, assigning the IP address 10.0.0.2 with a 255.0.0.0 mask, and enabling the interface. The 'show run' output displays the current configuration, which includes system settings like timestamps, hostname 'switch', SSH version 1, domain-name 'mydomain', and two local users: 'mypass' and 'mypass1'. The configuration ends with 'spanning-tree mode pvst' and a '--More--' prompt.

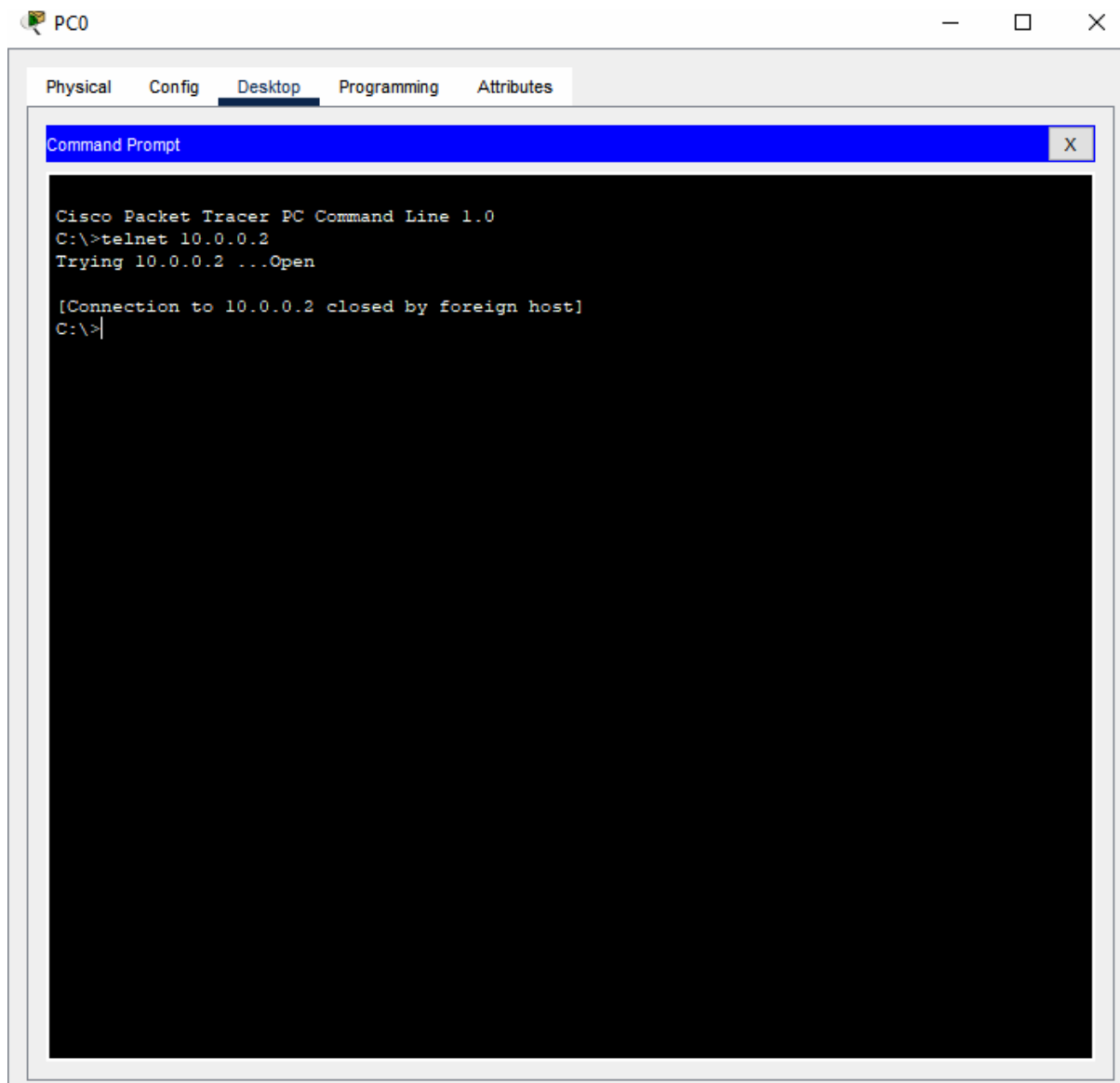
```
switch#
switch#
switch#
switch#
switch#
switch#en
switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
switch(config)#interface vlan 1
switch(config-if)#ip address 10.0.0.2 255.0.0.0
switch(config-if)#no shutdown
switch(config-if)#end
switch#
%SYS-5-CONFIG_I: Configured from console by console

switch#sh run
Building configuration...

Current configuration : 696 bytes
!
version 12.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname switch
!
!
!
ip ssh version 1
ip domain-name mydomain
!
username myname privilege 1 password 0 mypass
username myname1 privilege 1 password 0 mypass1
!
!
!
spanning-tree mode pvst
--More-- |
```

**Before Telnet configuration:**

**Go to comand prompt check telnet**



## Terminal

```
switch#
switch#
switch#
switch#
switch#en
switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
switch(config)#username myname password mypass
switch(config)#line vty 0 15
switch(config-line)#login local
switch(config-line)#transport input telnet
switch(config-line)#end
switch#
%SYS-5-CONFIG_I: Configured from console by console

switch#sh run
Building configuration...

Current configuration : 756 bytes
!
version 12.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname switch
!
!
!
ip ssh version 1
ip domain-name mydomain
!
username myname privilege 1 password 0 mypass
username myname1 privilege 1 password 0 mypass1
username mynamepasswordmypass privilege 1 password 0
!
!
!
--More--
```

## Terminal

```
switch#en
switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
switch(config)#username mynamepassword mypass
^
% Invalid input detected at '^' marker.

switch(config)#username mynamepasswordmypass
switch(config)#line vty 0 15
switch(config-line)#login local
switch(config-line)#transport input telnet
switch(config-line)#sh run
^
% Invalid input detected at '^' marker.

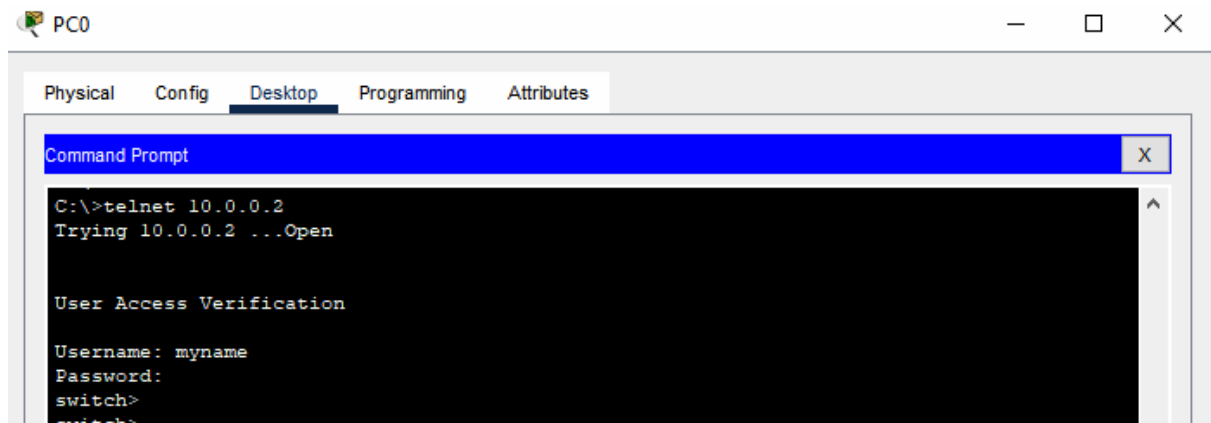
switch(config-line)#end
switch#
%SYS-5-CONFIG_I: Configured from console by console

switch#sh run
Building configuration...

Current configuration : 756 bytes
!
version 12.1
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname switch
!
!
!
ip ssh version 1
ip domain-name mydomain
!
username myname privilege 1 password 0 mypass
username myname1 privilege 1 password 0 mypass1
username mynamepasswordmypass privilege 1 password 0
```

**After Telnet configuration:**

**Go to comand prompt check telnet**



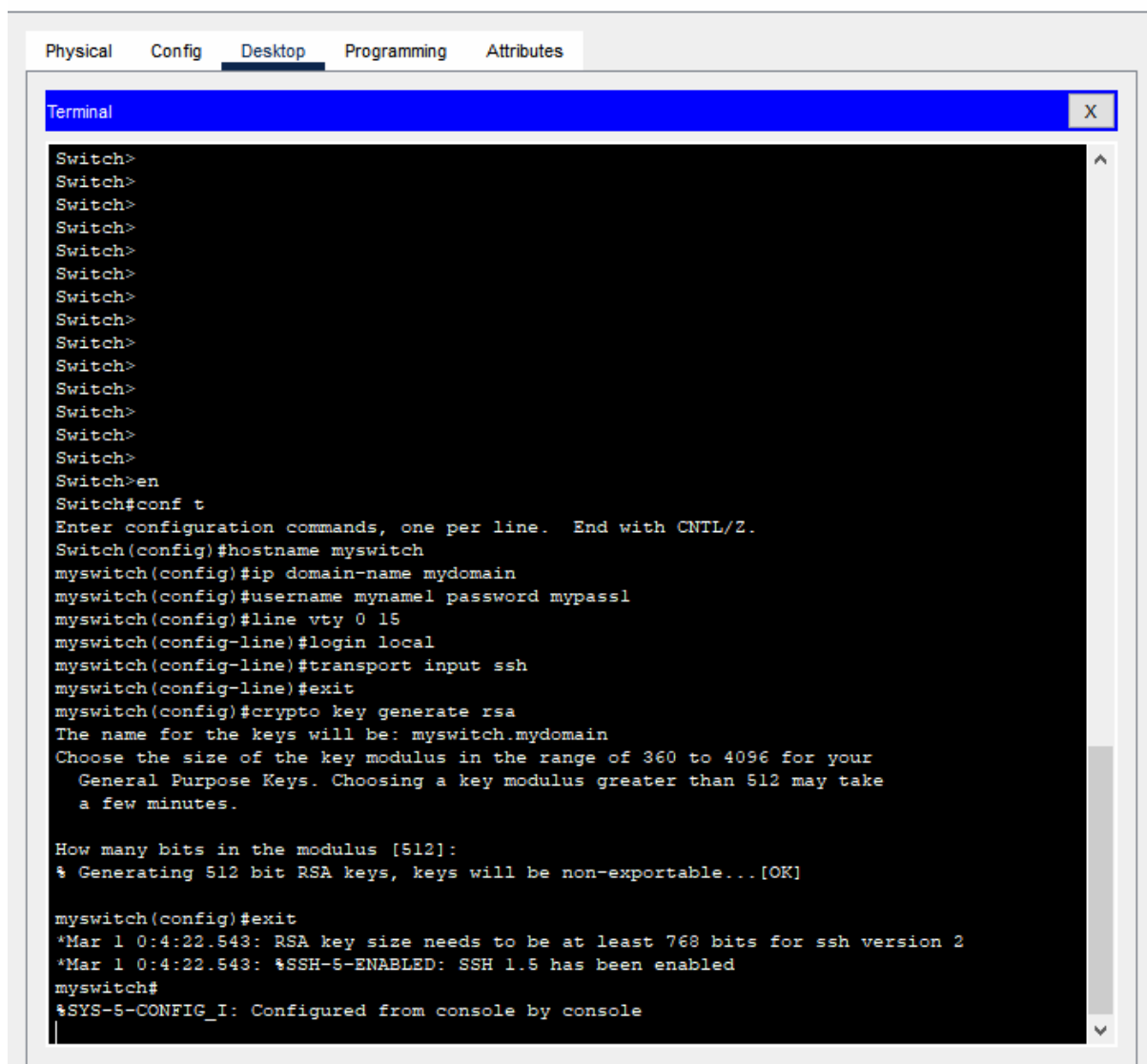
The screenshot shows a window titled "PC0" with a standard Windows interface (minimize, maximize, close buttons). Inside the window, there are tabs for "Physical", "Config", "Desktop", "Programming", and "Attributes". The "Desktop" tab is selected, and a "Command Prompt" window is open. The Command Prompt displays the following text:

```
C:\>telnet 10.0.0.2
Trying 10.0.0.2 ...Open

User Access Verification

Username: myname
Password:
switch>
switch>
```

**SSH:**



The screenshot shows a PC0 window with a terminal application open. The terminal window has a blue title bar labeled 'Terminal' and a close button. The terminal content shows a series of commands being entered into a switch's command-line interface. The commands configure the switch's hostname to 'myswitch', set the domain name to 'mydomain', create a local user 'mynamel' with password 'mypass1', enable VTY lines 0 to 15 with local login, and configure SSH. The SSH configuration includes generating RSA keys with a 512-bit modulus. The terminal output shows the successful completion of these commands, including messages about the RSA key size and SSH 1.5 being enabled. The terminal window is part of a larger application with tabs for 'Physical', 'Config', 'Desktop', 'Programming', and 'Attributes', with 'Desktop' currently selected.

```
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>
Switch>en
Switch#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#hostname myswitch
myswitch(config)#ip domain-name mydomain
myswitch(config)#username mynamel password mypass1
myswitch(config)#line vty 0 15
myswitch(config-line)#login local
myswitch(config-line)#transport input ssh
myswitch(config-line)#exit
myswitch(config)#crypto key generate rsa
The name for the keys will be: myswitch.mydomain
Choose the size of the key modulus in the range of 360 to 4096 for your
  General Purpose Keys. Choosing a key modulus greater than 512 may take
  a few minutes.

How many bits in the modulus [512]:
% Generating 512 bit RSA keys, keys will be non-exportable...[OK]

myswitch(config)#exit
*Mar 1 0:4:22.543: RSA key size needs to be at least 768 bits for ssh version 2
*Mar 1 0:4:22.543: %SSH-5-ENABLED: SSH 1.5 has been enabled
myswitch#
%SYS-5-CONFIG_I: Configured from console by console
```

**Now test SSH connection**

PC0



Physical Config **Desktop** Programming Attributes

Command Prompt



```
C:\>ssh -l myname1 10.0.0.2
```

```
Password:
```

```
myswitch>
```

```
myswitch>
```

```
myswitch>
```