# Router and IOS Basics Lab

1. Start PacketTracer.
2. Drag a router into the work area.
3. This will create router R1 in the center window
4. Click on the router and open a command window.

What does the router command prompt look like?\_\_\_\_ Router>\_\_\_

1. Using the Cisco Router Command Mode Summary on the next page as a reference, move to Privileged EXEC also known as “enable” mode.
2. What command did you use to move to privileged EXEC mode?\_enable\_\_
3. What does the command prompt look like?\_\_\_Router#\_\_\_
4. Now move into Global Configuration mode, using the Configure Terminal (config t) command
5. What does the command prompt look like?\_\_\_\_Router (config)#\_\_\_\_

***Now that your are in Global Configuration Mode, you can set up the router host name, and set the “Enable” password.***

1. Use the following command to set the router host name:

R1(config)# host Router1

1. Use the following command to set the Enable password:

Router1(config)# enable password *cisco*

*NOTE: The enable password can be removed using the “no enable password” command.*

1. Move back to User EXEC mode.
2. Using the password you just established, move to “enable” mode.

***You will now view the IOS information: (Stored in Flash Memory)***

1. Use the following command to view the IOS information:

Router1# show version

1. What version of the IOS software are you using?\_\_\_\_03.16.05.S\_\_\_\_
2. Make a screen shot of the output from the previous step and attach to the back of this lab.

***You will now view the startup configuration information: (Stored in NVRAM)***

1. Use the following command to view the startup configuration information:

Router1# show startup-config

*NOTE: this command can be shortened to “show start”.*

1. What does it tell you?\_\_\_startup-config is not present\_\_\_\_
2. Why do you suppose there is no startup-config file?\_\_\_we have never created one and the switch has never been configured\_\_\_
3. Type copy running-config startup-config
4. Hit ENTER when prompted for the Destination filename [startup-config]
5. Now type show startup-config again
6. What do you see now?\_\_\_\_\_it shows a file with the name and password and other basic config information\_\_\_\_\_\_\_

***You will now view the running configuration information: (Stored in RAM/DRAM)***

1. Use the following command to view the running configuration information:

Router1# show running-config

*NOTE: this command can be shortened to “show run”.*

1. What kinds of information are contained in the running configuration?

Router name, configuration, password, size of the configuration in memory, version, spanning tree mode pvst, interfaces and their individual configuration, flow-export version, 1 default vlan.

***Finally, you will view information about the network interfaces on the Router1.***

1. Use the following command to view detailed information about the network interfaces:

Router1# show interfaces

*NOTE: this command can be shortened to “show int”.*

1. What interfaces are connected to this router?

GigabitWthernet 0/0/0 administrativly down

GigabitWthernet 0/0/1 administrativly down

Vlan1 is administratively down

1. Use the following command to view summary status information about the network interfaces:

Router1# show ip interface brief

*NOTE: this command can be shortened to “show ip int brief”.*

1. What is the ‘Status’ of the interfaces connected to this router?
2. GigabitWthernet 0/0/0 administrativly down
3. GigabitWthernet 0/0/1 administrativly down
4. Vlan1 is administratively down

Show version screen shot

A screenshot of a computer program

Description automatically generated