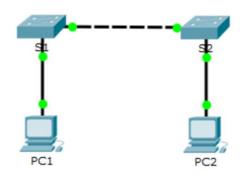


# University of Sri Jayewardenepura Faculty of Technology ITC 2302 Network Systems Design Take-Home Assignment

# **Configuring Initial Switch Settings**

#### **Topology**



## Task 1 - Verify the Default Switch Configuration

- > Open Packet Tracer and access the CLI of switch S1.
- > Enter privileged EXEC mode.
- Q1. Which command do you use to enter this mode?
- Q2. How does the prompt change when you enter privileged EXEC mode?
  - > Use the show running-config command to examine the current configuration.

- Q3. How many FastEthernet interfaces does the switch have?
- Q4. How many GigabitEthernet interfaces does the switch have?
- Q5. What is the range of values shown for the vty lines?

#### **Task 2 - Create a Basic Switch Configuration**

Assign a hostname S1 to the switch.

### Q6. Which command do you use?

> Secure access to the console by setting the password to letmein.

S1(config)# line console 0

S1(config-line)# password letmein

S1(config-line)# login

S1(config-line)# exit

S1(config)# exit

- Q7. Why is the login command required after setting the password?
- Q8. Exit to test if the password works. Provide a screenshot.
  - > Set the privileged EXEC mode password to c1\$c0 (The 0 in c1\$c0 is a zero, not a capital O).

S1(config)# enable password c1\$c0

- > Verify your configuration by logging out and logging in again.
- > Press <Enter> and you will now be asked for a password.
- ➤ The first password is the console password you configured for line con 0. Enter this password to return to user EXEC mode.
- Enter the command to access privileged mode.
- Enter the second password you configured to protect privileged EXEC mode.
- ➤ Verify your configurations by examining the contents of the running-configuration file.

S1# show running-config

Q9. Why is the enable secret password preferred over enable password?

#### **Task 3 - Secure Passwords with Encryption**

- Examine the running configuration again.
- ➤ The enable password should be replaced with the newer encrypted secret password using the enable secret command.
- > Set the enable secret password to itsasecret.

S1(config)# enable secret itsasecret

S1(config)# exit

Note: The enable secret password overrides the enable password. If both are configured on the switch, you must enter the enable secret password to enter privileged EXEC mode.

Q10. Is the enable secret password visible in plain text?

➤ Enter the show running-config command again to verify the new enable secret password is configured.

Note: You can abbreviate show running-config as

#### S1# show run

Q11. Why is the enable secret password displayed differently from what we configured?

➤ The enable secret password was encrypted, but the enable and console passwords were still in plain text. We will now encrypt these plain text passwords using the service password-encryption command.

S1(config)# service password-encryption

Q11. If you configure any more passwords on the switch, will they be displayed in the configuration file as plain text or in encrypted form? Explain

- Answer all the questions.
- Take screenshots for all three parts.
- Put everything in one PDF document. Rename the file with your name and index number and Submit.