Lab Sheet – 02

Title: Basic Switch and End Device Configuration

Aims:

- Get familiar with IOS command structure
- Get familiar with basic nodes (Device) configuration

Tasks:

- Set Up the Network Topology
- Configure PC Hosts
- Configure and Verify Basic Switch Settings

Activities

Addressing Table

Device	Interface	IP Address	Subnet Mask
RegNo-S1	VLAN 1	192.168.1.1	255.255.255.0
RegNo-S2	VLAN 1	192.168.1.2	255.255.255.0
RegNo-PC-A	NIC	192.168.1.10	255.255.255.0
RegNo-PC-B	NIC	192.168.1.11	255.255.255.0

1. Set Up the Network Topology
   a. Power on the devices.
   b. Connect the two switches.
   c. Connect the PCs to their respective switches.
   d. Visually inspect network connections.
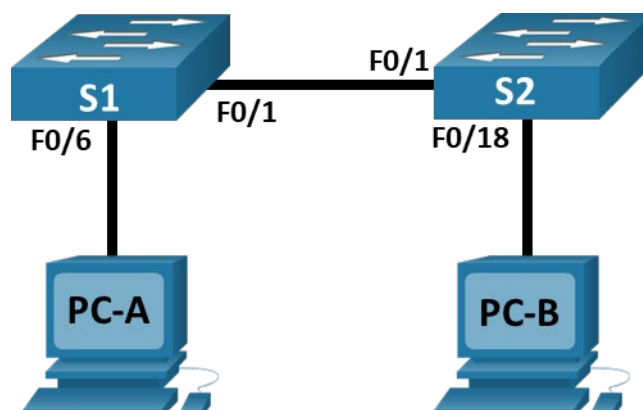
2. Configure PC Hosts
   a. Configure static IP address information on the PCs according to the Addressing Table.
   b. Verify PC settings and connectivity.
3. Configure and Verify Basic Switch Settings
   a. Console into the switch. Enter the global configuration mode.

      Switch>enable
      Switch#

   b. Go global configure mode - command: **configure terminal**

   c. Give the switch a name according to the Addressing Table.

      Switch#configure terminal
      Switch(config)#hostname RegNo-S1
      S1(config)#

   d. Prevent unwanted DNS lookups.

      Switch(config)#no ip domain-lookup

   e. Configure password for console access

   f. enter line console configuration mode command: **line console 0**

      (The zero is used to represent the first (and in most cases the only) console   interface)

   g. Set password for CLI command:

      S1#configure terminal
      S1(config)#line console 0
      S1(config-line)#password 1234
      S1(config-line)#login
      S1(config-line)#end

   h. Use **class** as the privileged EXEC password

      S1(config)#enable secret class

   i. Encrypt the password

      S1#configure terminal
      S1(config)#service password-encryption
      S1(config)#

j. Configure and enable the Switch Virtual Interface according to the Addressing Table.

```
S1(config)# interface vlan 1
S1(config-if)# ip address 192.168.1.1 255.255.255.0
S1(config-if)# no shutdown
%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan1,
changed state to up
```

k. Configure Banner Messages

```
S1#configure terminal
S1(config)#banner motd #Authorized Access Only#
```

l. Verify all configuration

```
S1#show running-config
```

m. Save configuration

```
S1>enable
S1#copy running-config startup-config
Destination filname [startup-config]?
Building configuration...
[OK]
S1#
```