EXPERIMENT-7

Aim:

To configure the hostnames and IP address on two Cisco Internetwork Operating System (IOS) and verify the connectivity between the two PC and devices.

Software Used:

Cisco Packet Tracer

Requirements:

= Use a console connection to access each switch.

= Name Class-A and Class-B switches.

= Use the xAw6k password for all lines.

= Use the 6EBUp secret password.

= Encrypt all clear text passwords.

= Configure an appropriate message-of-the-day (MOTD) banner.

= Configure addressing for all devices according to the Addressing Table.

= Save your configurations.

= Verify connectivity between all devices.

Procedure:

The following Addressing table is used to configure the IP address and the subnet mask of the VLAN interface and the NIC interface.

Addressing Table

Device	Interface	IP Address	Subnet Mask
Class-A	VLAN 1	172.16.5.35	255.255.255.0
Class-B	VLAN 1	172.16.5.40	255.255.255.0
Student-1	NIC	172.16.5.50	255.255.255.0
Student-2	NIC	172.16.5.60	255.255.255.0

Network:
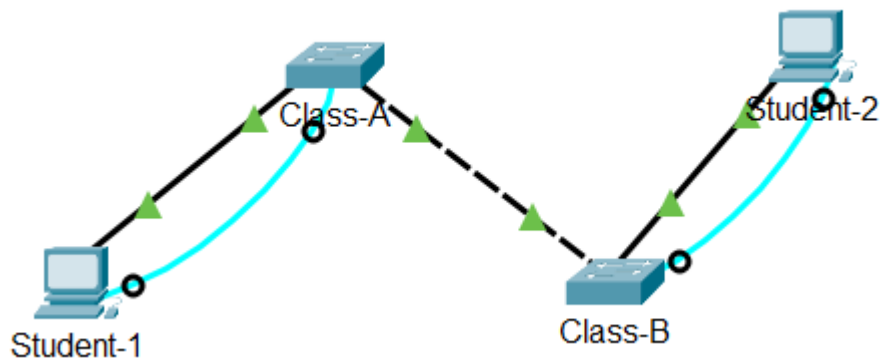
Class A:

```
Class-A>enable
Password:
Class-A#show run
Building configuration...

Current configuration : 1215 bytes
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname Class-A
!
!
enable secret 5 $1$mERr$uj9Jma9yMOo4m80CGAhoP1
!
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
!
```

Class B:

```
Class-B>enable
Password:
Class-B#show run
Building configuration...

Current configuration : 1215 bytes
!
version 15.0
no service timestamps log datetime msec
no service timestamps debug datetime msec
service password-encryption
!
hostname Class-B
!
!
enable secret 5 $1$mERr$uj9Jma9yMOo4m80CGAhoP1
!
!
!
!
!
!
spanning-tree mode pvst
spanning-tree extend system-id
```

Student 1:

IP Configuration

○ DHCP	● Static	
IPv4 Address	172.16.5.50	
Subnet Mask	255.255.255.0	
Default Gateway	0.0.0.0	
DNS Server	0.0.0.0	

IPv6 Configuration

○ Automatic	● Static	
IPv6 Address		/
Link Local Address		
Default Gateway		
DNS Server		

802.1X

Student 2:

Network Test:

```
C:\>ping 172.16.5.60

Pinging 172.16.5.60 with 32 bytes of data:

Reply from 172.16.5.60: bytes=32 time<1ms TTL=128
Reply from 172.16.5.60: bytes=32 time<1ms TTL=128
Reply from 172.16.5.60: bytes=32 time<1ms TTL=128
Reply from 172.16.5.60: bytes=32 time<1ms TTL=128

Ping statistics for 172.16.5.60:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms
```

Conclusion:

The switch was configured successfully according to the ARP table.