**Set Hostname**   
Switch(config)#hostname S1

**Save Running Config to NVRAM**  
S1#copy running-config startup-config

**Secure Line Console (Local Password)**    
S1(config)#line con 0  
S1(config-line)#password cisco  
S1(config-line)#login

**Configure VTY for Telenet**   
S1(config)#line vty 0 4  
S1(config-line)#password cisco  
S1(config-line)#login

**Privileged mode passwords (encypted)**  
S1(config)#enable secret cisco

**Service Password Encryption**  
S1(config)#service password-encryption

**MOTD**  
S1(config)#banner motd "This is a secure system."

**Prevent DNS Lookup**  
S1(config)#no ip domain-lookup

**Show IP Information about interface**  
S1#show IP {interface-id}

**Show History of commands Entered**  
S1#show history

**Display connected interfaces**  
S1#show ip interface brief

**LAN config**  
R1(Config)#interface gigabitethernet 0/1  
R1(Config-if)#ip address 192.168.11.1 255.255.255.0  
R1(Config-if)#description LAN-11  
R1(config-if)#no shutdown

**LAN config (IPv6)**  
R1(Config)#interface gigabitethernet 0/1  
R1(Config-if)#ipv6 address 2001:db8:acad:1::1/64  
R1(config-if)#no shutdown

**Configure Default Gateway**  
S1(config)#ip default-gatgeway 192.168.10.1

**Configure Dynamic Port Security**S1(config)#interface fastethernet 0/18  
S1(config-if)#switchport mode access  
S1(config-if)#switchport port-security

**Configure Sticky Port Security**S1(config)#interface fastethernet 0/19  
S1(config-if)#switchport mode access  
S1(config-if)#switchport port-security  
S1(config-if)#switchport port-security maximum 10 [10 attempts]  
S1(config-if)#switchport port-security mac-address sticky

**Verify MAC Address Sticky**S1#show port-security interface fastethernet 0/19

**Verify Secure MAC Address**S1#show port-security address

**Inter-VLAN Switch Configuration**S1(config)#vlan 10 [creates vlan10]  
Switch(config-vlan)#name student [names vlan]  
S1(config-vlan)#vlan 30 [creates vlan 30]  
Switch(config-vlan)#name faculty [names vlan]  
S1(config-vlan)#interface f0/11  
S1(config-if)#switchport access vlan 10 [assigns f0/11 to vlan 10]

**Set IP Address on vlan**  
S1(config)#interface vlan1  
S1(config-if)#ip address 192.168.1.253 255.255.255.0  
S1(config-if)#no shutdown

**Remove ports on a VLAN** -   
Switch(config)#interface F0/18  
Switch(config-if)#no switchport access vlan

**Trunk Configuration**-   
Switch(config)#interface F0/18  
Switch(config-if)#switchport mode trunk  
Switch(config-if)#switchport trunk native vlan 99  
Switch(config-if)#switchport trunk allowed vlan 10, 20, 30, 99

**Discovering Devices Connected to S1**  
S1# show lldp neighbors  
   
**Displaying More Information about S1’s LLDP Neighbors**  
S1# show lldp neighbors detail  
   
**Show cdp Command**  
Router# show cdp  
    
**Configuring CDP on the Interface**  
Switch(config)# interface gigabitethernet 0/1  
Switch(config-if)# cdp enable  
   
**CDP Globally Disabled and Re-enabled on the Router**  
Router(config)# no cdp run  
Router(config)# exit  
Router# show cdp  
% CDP is not enabled  
Router# conf t  
Router(config)# cdp run  
  
**Displaying More Information about Switch Connected to R1**  
R1# show cdp neighbors detail  
   
**Displaying enabled CDP interfaces on a device**  
Router# show cdp interface

**[ADDITIONAL PASSWORD SECURITY]**  
{Setting lock out}  
S1(config)#security password min-length 8  
S1(config)#login block-for 120 attempts 3 within 60   
S1(config)#line vty 0 4  
S1(config)#exec-timeout 10  
S1(config)#end

**SSH**R1(config)# ip domain-name span.com  
R1(config)# crypto key generate rsa general-keys modulus 1024  
R1(config)#username BOB secret CISCO  
R1(config#line bty 04  
R1(config-line)#login local  
R1(config-line)#transport input ssh  
R1(config-line)#exit