

Final Skills Special Commands (Karina)

1. Set hostname on all devices

```
Switch(config) # hostname switch 3  
Switch 3(config) # exit
```

2. Motd on All devices

```
Router1(config) # banner motd + * *  
* * Student ID 103832293 * * +  
Router1(config) # exit
```

3. Configure SSH access on both switches + Router

```
Switch(config) # ip domain-name cna.lab  
Switch(config) # crypto key generate rsa  
general-keys modulus 1024
```

```
Switch(config) # username sample privilege  
15 secret exam
```

```
Switch(config) # line vty 0 15  
Switch(config-line) # transport input ssh  
Switch(config-line) # login local  
Switch(config-line) # exit
```

* Router1 (config) # line vty 0 15
Router1(config-line) # transport input ssh
Router1(config-line) # login local
Router1(config-line) # exit

4. Create VLANs on both switches

```
switch(config)# vlan 45
switch(config-vlan)# name storages
switch(config-vlan)# vlan 5
switch(config-vlan)# name Three
switch(config-vlan)# exit
```

* To validate —

```
switch# sh vlan br
```

5. Allocate Switchports to the specific VLAN that is given —

```
switch(config)# int range f0/13-16
switch(config-if-range)# switchport
mode access
switch(config-if-range)# int range f0/17-20
switch(config-if-range)# switchport access
vlan 45
```

6. Trunk switchports which are needed to be trunked on the switches

```
switch(config)# int range f0/1-2
switch(config-if-range)# switchport mode
trunk
switch2(config)# int range g1/0/11, g1/0/1-2
switch2(config-if-range)# switchport mode
trunk
```


management
7. Configure IP Addresses on default gateway —
Both switches —

```
Switch3(config)# int vlan 451  
Switch3 (config-if) # ip address 83.174.16.165  
255.255.255.248  
Switch3 (config-if) # exit
```

[.....some way 54 as well.]

8. Set default-Gateway on both switches ---

```
Switch (config) # ip default-gateway  
83.174.16.166  
Switch (config) # exit
```

* default gateway would be given management IP Address.

9. Configure router - on - a - stick

```
Router(config) # int g0/0/1.5
Router(config-subif) # description to VLAN 5
Router(config-subif) # encapsulation dot1Q 5
Router(config-subif) # ip address 83.174.16.126
                                     255.255.255.128
```

* (Same way) configure all the subinterface with IP addresses

10. Loopback on Router

```
Router(config) # int loopback 0
Router(config) # ip address 93.216.87.1
                                     255.255.255.248
Router(config) # exit
→ Router(config) # description INTERNET HOST
```

* To validate → Router # sh ip route ^{SIMULATION}

* To validate description or, test description -

```
Router # sh int description
```




If the description doesn't show and it is required to be shown then,
Let's configure description on Router again.

```
Routerc(config) # int g0/0/1
Routerc(config-if) # description TRUNK TO CURLY
Routerc(config-if) # int g0/0/1.5
Routerc(config-if) # description TO VLAN 5
Routerc(config-if) # int g0/0/1.278
Routerc(config-if) # description TO VLAN 451
```

To validate → #sh int description

Etherchannel Bundling on both switches

```
Switch1(config) # int range f0/1-2
Switch1(config-if-range) # shutdown
Switch1(config-if-range) # channel-group 1 mode
Switch1(config-if-range) # active
```

```
Switch3(config) # int range g0/1-2
Switch3(config-if-range) # channel-group 1 mode
Switch3(config-if-range) # active
```

* To validate → Switch #sh etherchannel
summary

Root bridge / STP for VLANs on Switches

```
Curly(config)# spanning-tree vlan 5, 451  
root primary
```

```
Curly(config)# exit
```

Notes

* To verify/validate \Rightarrow Curly # Sh spanning-tree

* VLAN number will be given on the question.

```
Moe(config)# spanning-tree vlan 45, 278  
root primary
```

* "Switch ports must be disabled" means you have make it administratively down

☒ Switchport security mode of 'protect',
Security mode of "mac address sticky"
a maximum number of 4
connected devices

Moe(config)# int range # f0/17 - 20

→ Moe(config-if-range)# switchport port-security

Moe(config-if-range)# switchport port-security violation protect

→ Moe(config-if-range)# switchport port-security mac-address sticky

→ Moe(config-if-range)# switchport port-security maximum

☒ Switchport Security mode of 'restrict'

(config-if-range)# switchport port-security violation restrict

☐ Enable ~~on~~ accessports, allocated to the given VLAN with switchport security mode of restrict, mac-address sticky.

Moe(config)# int range f0/21-24

Moe(config-if-range)# switchport mode access

Moe(config-if-range)# switchport access vlan 278

Moe(config-if-range)# switchport port-security violation restrict

Moe(config-if-range)# switchport port-security mac-address sticky

* To validate → Moe# sh port-security