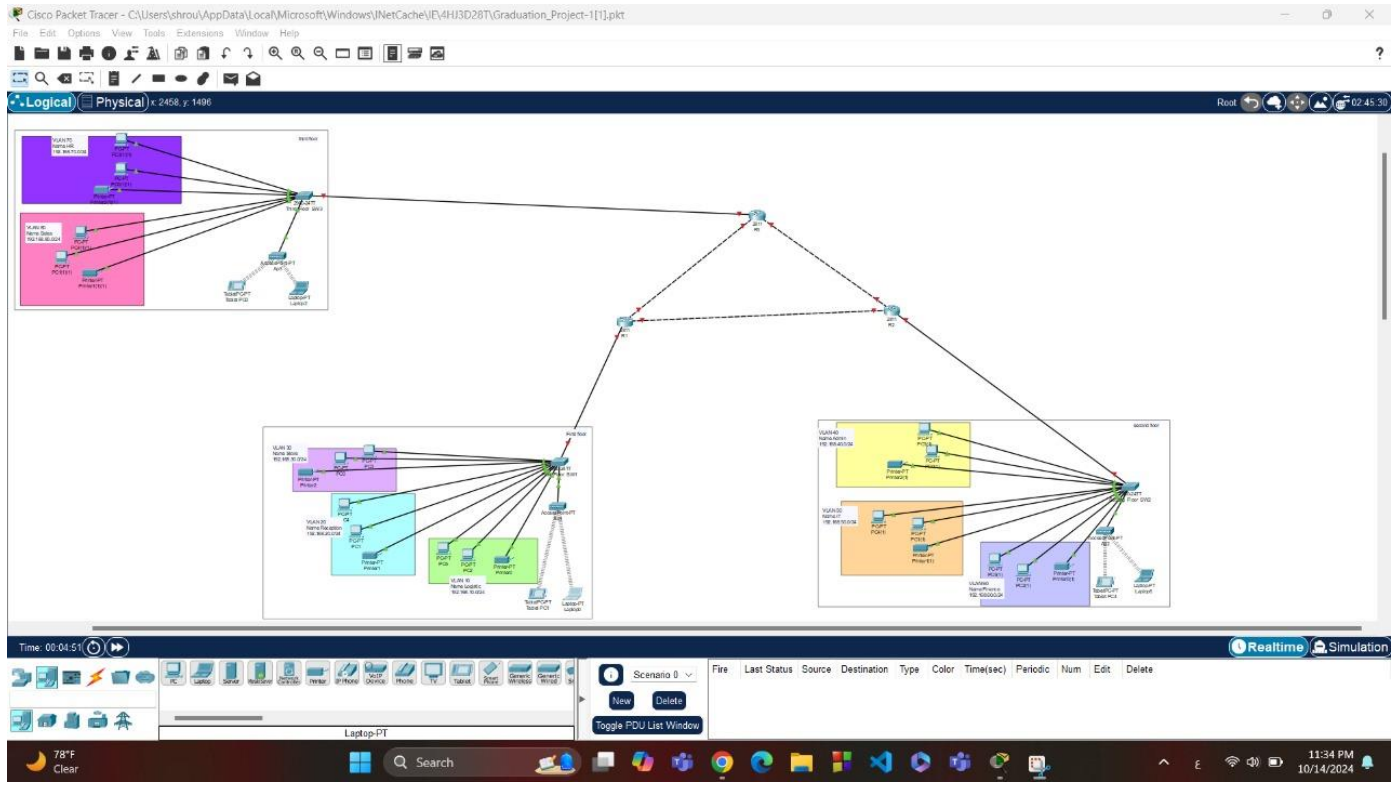# Graduation Project

First_Floor_SW1

Switch>en

Switch#conf t

Switch(config)#hostname SW1

SW1(config)#enable password abc

SW1(config)#username abc password abc

SW1(config)#vlan 10

SW1(config-vlan)#name Logistic

SW1(config-vlan)#vlan 20

SW1(config-vlan)#name Reception

SW1(config-vlan)#vlan 30

SW1(config-vlan)#name Store

SW1(config-vlan)#do wr

SW1(config-vlan)#ex

SW1#sh vlan

SW1#conf t

SW1(config)#int range fa0/7-9

SW1(config-if-range)#switchport mode access

SW1(config-if-range)#switchport access vlan 10

SW1(config-if-range)#exit

SW1(config)#int range fa0/4-6

SW1(config-if-range)#switchport mode access

SW1(config-if-range)#switchport access vlan 20

SW1(config-if-range)#ex

SW1(config)#int range fa0/1-3

SW1(config-if-range)#switchport mode access

SW1(config-if-range)#switchport access vlan 30

SW1(config-if-range)#exit

SW1(config)#

SW1(config)#do wr

SW1#sh vlan br

SW1#conf t

SW1(config)#int fa0/10

SW1(config-if)#switchport mode trunk

SW1(config-if)#do wr

SW1(config-if)#ex

Second_Floor_SW2

Switch>en

Switch#conf t

Switch(config)#enable password abc

Switch(config)#username abc password abc

Switch(config)#hostname SW2

SW2(config)#vlan 40

SW2(config-vlan)#name Admin

SW2(config-vlan)#vlan 50

SW2(config-vlan)#name IT

SW2(config-vlan)#vlan 60

SW2(config-vlan)#name Finance

SW2(config-vlan)#do wr

SW2(config-vlan)#ex

SW2#sh vlan

SW2#conf t

SW2(config)#int range fa0/1-3

SW2(config-if-range)#switchport mode access

SW2(config-if-range)#switchport access vlan 40

SW2(config-if-range)#exit

SW2(config)#int range fa0/4-6

SW2(config-if-range)#switchport mode access

SW2(config-if-range)#switchport access vlan 50

SW2(config-if-range)#exit

SW2(config)#int range fa0/7-9

SW2(config-if-range)#switchport mode access

SW2(config-if-range)#switchport access vlan 60

SW2(config-if-range)#exit

SW2#sh vlan br

SW2#conf t

SW2(config)#int fa0/10

SW2(config-if)#switchport mode trunk

SW2(config-if)#exit

SW2(config)#do wr

Third_Floor_SW3

Switch>en

Switch#conf t

Switch(config)#hostname SW3

SW3(config)#enable password abc

SW3(config)#username abc password abc

SW3(config)#vlan 70

SW3(config-vlan)#name HR

SW3(config-vlan)#vlan 80

SW3(config-vlan)#name Sales

SW3(config-vlan)#do wr

SW3(config-vlan)#ex

SW3#sh vlan

SW3#conf t

SW3(config)#int range fa0/1-3

SW3(config-if-range)#switchport mode access

```
SW3(config-if-range)#switchport access vlan 70

SW3(config-if-range)#exit

SW3(config)#int range fa0/4-6

SW3(config-if-range)#switchport mode access

SW3(config-if-range)#switchport access vlan 80

SW3(config-if-range)#exit

SW3(config)#do wr


SW3#sh vlan br


SW3#conf t

SW3(config)#int fa0/7

SW3(config-if)#switchport mode trunk

SW3(config-if)#do wr

SW3(config-if)#exit
```

```
Router>

Router>

Router>en

Router#config t

Enter configuration commands, one per line.  End with CNTL/Z.

Router(config)#hostname R1

R1(config)#

R1(config)#int f0/0

R1(config-if)#ip add 192.168.12.1 255.255.255.0

R1(config-if)#no sh


R1(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up
```

R1(config-if)#

R1(config-if)#int f1/0

R1(config-if)#ip add 192.168.13.1 255.255.255.0

R1(config-if)#no sh

R1(config-if)#

%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

R1(config-if)#

R1(config-if)#exit

R1(config)#int f0/1

R1(config-if)#no sh

R1(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

R1(config-if)#no ip add

R1(config-if)#int f0/1.10

R1(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet0/1.10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.10, changed state to up

R1(config-subif)#

R1(config-subif)#en

% Ambiguous command: "en"

R1(config)#en

% Ambiguous command: "en"

R1(config)#int f0/1

R1(config-if)#no sh

R1(config-if)#

R1(config-if)#no ip add

R1(config-if)#int f0/1.10

R1(config-subif)#

R1(config-subif)#encapsulation dot1Q 10

R1(config-subif)#ip add 192.168.1.1 255.255.255.0

R1(config-subif)#no sh

R1(config-subif)#exit

R1(config)#int f0/1.20

R1(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet0/1.20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.20, changed state to up

R1(config-subif)#encapsulation dot1Q 20

R1(config-subif)#ip add 192.168.20.1 255.255.255.0

R1(config-subif)#exit

R1(config)#int f0/1.10

R1(config-subif)#ip add 192.168.10.1 255.255.255.0

R1(config-subif)#exit

R1(config)#

R1(config)#do sh ip int br

Interface	IP-Address	OK? Method	Status	Protocol
FastEthernet0/0	192.168.12.1	YES manual	up	down
FastEthernet0/1	unassigned	YES unset	up	up
FastEthernet0/1.10	192.168.10.1	YES manual	up	up
FastEthernet0/1.20	192.168.20.1	YES manual	up	up

FastEthernet1/0   192.168.13.1   YES manual up   down

FastEthernet1/1   unassigned   YES unset administratively down down

Vlan1   unassigned   YES unset administratively down down

R1(config)#int f0/1.30

R1(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet0/1.30, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1.30, changed state to up

R1(config-subif)#encapsulation dot1Q 30

R1(config-subif)#ip add 192.168.30.1 255.255.255.0

R1(config-subif)#no sh

R1(config-subif)#

R1(config-subif)#

R1(config-subif)#exit

R1(config)#

R1(config)#router ospf 1

R1(config-router)#network 192.168.10.0.0.0.0.255 a 0

                ^

% Invalid input detected at '^' marker.

R1(config-router)#net

% Incomplete command.

R1(config-router)#network 192.168.10.0 0.0.0.255 a 0

R1(config-router)#network 192.168.20.0 0.0.0.255 a 0

R1(config-router)#network 192.168.30.0 0.0.0.255 a 0

R1(config-router)#network 192.168.12.0 0.0.0.255 a 0

R1(config-router)#network 192.168.13.0 0.0.0.255 a 0

R1(config-router)#do wr

Building configuration...

[OK]

R1(config-router)#exit

R1(config)#ip dh

% Incomplete command.

R1(config)#ip dhcp ?

  excluded-address Prevent DHCP from assigning certain addresses

  pool   Configure DHCP address pools

  relay   DHCP relay agent parameters

R1(config)#ip dhcp pool vlan10

R1(dhcp-config)#network 192.168.10.0 255.255.255.0

R1(dhcp-config)#default-router 192.168.10.1

R1(dhcp-config)#exit

R1(config)#ip dhcp excluded-address 192.168.10.1

R1(config)#ip dhcp excluded-address 192.168.20.1

R1(config)#ip dhcp excluded-address 192.168.30.1

R1(config)#

R1(config)#ip dhcp pool vlan20

R1>sh ip int br

Interface   IP-Address   OK? Method Status   Protocol

FastEthernet0/0   192.168.12.1   YES manual up   up

FastEthernet0/1   unassigned   YES unset up   up

FastEthernet0/1.10   192.168.10.1   YES manual up   up

FastEthernet0/1.20   192.168.20.1   YES manual up   up

FastEthernet0/1.30   192.168.30.1   YES manual up   up

FastEthernet1/0   192.168.13.1   YES manual up   down

FastEthernet1/1   unassigned   YES unset administratively down down

Vlan1   unassigned   YES unset administratively down down

R1>

01:02:24: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.60.1 on FastEthernet0/0 from LOADING to FULL, Loading Done

----

 R2

Router>

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R2

R2(config)#

R2(config)#int f0/0

R2(config-if)#ip add 192.168.12.2 255.255.255.0

R2(config-if)#no sh

R2(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

R2(config-if)#

R2(config-if)#

R2(config-if)#int f0/1

R2(config-if)#ip add 192.168.23.2 255.255.255.0

R2(config-if)#no sh

R2(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

R2(config-if)#

R2(config-if)#exit

```
R2(config)#int f1/0

R2(config-if)#no sh


R2(config-if)#

%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up


%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up


R2(config-if)#exit

R2(config)#

R2(config)#int f1/0

R2(config-if)#exit

R2(config)#f1/0.40

      ^

% Invalid input detected at '^' marker.


R2(config)#int f1/0.40

R2(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet1/0.40, changed state to up


%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0.40, changed state to up


R2(config-subif)#encapsulation dot1Q 40

R2(config-subif)#ip add 192.168.40.1 255.255.255.0

R2(config-subif)#exit

R2(config)#

R2(config)#int f1/0.50

R2(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet1/0.50, changed state to up
```

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0.50, changed state to up

R2(config-subif)#encapsulation dot1Q 50

R2(config-subif)#ip add 192.168.50.1 255.255.255.0

R2(config-subif)#no sh

R2(config-subif)#

R2(config-subif)#int f1/0.60

R2(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet1/0.60, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0.60, changed state to up

R2(config-subif)#encapsulation dot1Q 60

R2(config-subif)#ip add 192.168.60.1 255.255.255.0

R2(config-subif)#no sh

R2(config-subif)#

R2(config-subif)#exit

R2(config)#

R2(config)#router ospf 1

R2(config-router)#network 192.168.40.0 0.0.0.255 a 0

R2(config-router)#network 192.168.50.0 0.0.0.255 a 0

R2(config-router)#network 192.168.60.0 0.0.0.255 a 0

R2(config-router)#network 192.168.23.0 0.0.0.255 a 0

R2(config-router)#network 192.168.12.0 0.0.0.255 a 0

R2(config-router)#do wr

01:02:24: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.30.1 on FastEthernet0/0 from LOADING to FULL, Loading Done

Building configuration...

[OK]

R2(config-router)#exit

R2(config)#ip dhcp pool vlan40

R2(dhcp-config)#network 192.168.40.0 255.255.255.0

R2(dhcp-config)#default-router 192.168.40.1

R2(dhcp-config)#dns-server 8.8.8.8

R2(dhcp-config)#exit

R2(config)#ip dhcp pool vlan50

R2(dhcp-config)#network 192.168.50.0 255.255.255.0

R2(dhcp-config)#default-router 192.168.50.1

R2(dhcp-config)#dns-server 8.8.8.8

R2(dhcp-config)#exit

R2(config)#ip dhcp pool vlan60

R2(dhcp-config)#network 192.168.60.0 255.255.255.0

R2(dhcp-config)#default-router 192.168.60.1

R2(dhcp-config)#dns-server 8.8.8.8

R2(dhcp-config)#exit

R2(config)#ip dhcp excluded-address 192.168.40.1

R2(config)#ip dhcp excluded-address 192.168.50.1

R2(config)#ip dhcp excluded-address 192.168.60.1

R2(config)#do wr

Building configuration...

[OK]

R2(config)#

R2(config)#

R3

Router>

Router>en

Router#config t

Enter configuration commands, one per line. End with CNTL/Z.

Router(config)#hostname R3

R3(config)#

R3(config)#int f0/0

R3(config-if)#ip add 192.168.13.3 255.255.255.0

R3(config-if)#no sh

R3(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

R3(config-if)#

R3(config-if)#int f0/1

R3(config-if)#ip add 192.168.23.3 255.255.255.0

R3(config-if)#no sh

R3(config-if)#

%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

R3(config-if)#

R3(config-if)#exit

R3(config)#int f1/0

R3(config-if)#no sh

R3(config-if)#

%LINK-5-CHANGED: Interface FastEthernet1/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0, changed state to up

R3(config-if)#exit

R3(config)#int f1/0

R3(config-if)#no sh

R3(config-if)#no ip add

R3(config-if)#exit

R3(config)#

R3(config)#int f1/0

R3(config-if)#exit

R3(config)#int f1/0.70

R3(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet1/0.70, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0.70, changed state to up

R3(config-subif)#

R3(config-subif)#encapsulation dot1Q 70

R3(config-subif)#ip add 192.168.70.1 255.255.255.0

R3(config-subif)#

R3(config-subif)#exit

R3(config)#

R3(config)#int f1/0.80

R3(config-subif)#

%LINK-5-CHANGED: Interface FastEthernet1/0.80, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet1/0.80, changed state to up

R3(config-subif)#encapsulation dot1Q 80

R3(config-subif)#

R3(config-subif)#ip add 192.168.80.1 255.255.255.0

R3(config-subif)#no sh

R3(config-subif)#

R3(config-subif)#exit

R3(config)#do sh ip int br

Interface   IP-Address   OK? Method Status   Protocol

FastEthernet0/0   192.168.13.3   YES manual up   up

FastEthernet0/1   192.168.23.3   YES manual up   up

FastEthernet1/0   unassigned   YES unset up   up

FastEthernet1/0.70   192.168.70.1   YES manual up   up

FastEthernet1/0.80   192.168.80.1   YES manual up   up

FastEthernet1/1   unassigned   YES unset administratively down down

Vlan1   unassigned   YES unset administratively down down

R3(config)#router ospf 1

R3(config-router)#network 192.168.70.0 0.0.0.255 a 0

R3(config-router)#network 192.168.80.0 0.0.0.255 a 0

R3(config-router)#network 192.168.13.0 0.0.0.255 a 0

R3(config-router)#network 192.168.23

01:37:02: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.30.1 on FastEthernet0/0 from LOADING to FULL, Loading Done

.

              ^

% Invalid input detected at '^' marker.

R3(config-router)#network 192.168.23.0 0.0.0.255 a 0

R3(config-router)#do wr

Building configuration...

[OK]

R3(config-router)#

01:37:53: %OSPF-5-ADJCHG: Process 1, Nbr 192.168.60.1 on FastEthernet0/1 from LOADING to FULL, Loading Done

R3(config-router)# exit

R3(config)#

R3(config)#ip

% Incomplete command.

R3(config)#ip dhcp pool vlan70

R3(dhcp-config)#network 192.168.70.0 255.255.255.0

R3(dhcp-config)#default-router 192.168.70.1

R3(dhcp-config)#dns-server 8.8.8.8

R3(dhcp-config)#exit

R3(config)#ip dhcp pool vlan80

R3(dhcp-config)#network 192.168.80.0 255.255.0

                              ^

% Invalid input detected at '^' marker.

R3(dhcp-config)#network 192.168.80.0 255.255.255.0

R3(dhcp-config)#default-router 192.168.80.1

R3(dhcp-config)#dns-server 8.8.8.8

R3(dhcp-config)#do wr

R3(dhcp-config)#exit

R3(config)#ip dhcp excluded-address 192.168.70.1

R3(config)#ip dhcp excluded-address 192.168.80.1

R3(config)#do wr

Building configuration...

[OK]

R3(config)#

R3(config)#

--

SW2(config-if)#ip add 192.168.50.2 255.255.255.0

SW2(config-if)#no sh

SW2(config-if)#exit

SW2(config)#ip domain-name abc

SW2(config)#crypto key generate rsa

The name for the keys will be: SW2.abc

Choose the size of the key modulus in the range of 360 to 4096 for your

  General Purpose Keys. Choosing a key modulus greater than 512 may take

  a few minutes.

How many bits in the modulus [512]: 2024

% Generating 2024 bit RSA keys, keys will be non-exportable...[OK]

SW2(config)#ip ssh version 2

*Mar 1 0:54:8.279: %SSH-5-ENABLED: SSH 1.99 has been enabled

SW2(config)#

SW2(config)#

SW2(config)#line vty 0 4

SW2(config-line)#transport input ssh

SW2(config-line)#

SW2(config-line)#login local

SW2(config-line)#

SW2(config-line)#exit

SW2(config)#

SW2(config)#exit

SW2#

%SYS-5-CONFIG_I: Configured from console by console

SW2#

SW2#sh run

Building configuration...

Current configuration : 1744 bytes

!

version 15.0

no service timestamps log datetime msec

no service timestamps debug datetime msec

no service password-encryption

!

hostname SW2

!

enable password abc

!

!

!

ip ssh version 2

ip domain-name abc

!

username abc privilege 1 password 0 abc

!

!

!

spanning-tree mode pvst

spanning-tree extend system-id

!

interface FastEthernet0/1

 switchport access vlan 40

 switchport mode access

!

interface FastEthernet0/2

 switchport access vlan 40

```
 switchport mode access
!
interface FastEthernet0/3
 switchport access vlan 40
 switchport mode access
!
interface FastEthernet0/4
 switchport access vlan 50
 switchport mode access
!
interface FastEthernet0/5
 switchport access vlan 50
 switchport mode access
!
interface FastEthernet0/6
 switchport access vlan 50
 switchport mode access
!
interface FastEthernet0/7
 switchport access vlan 60
 switchport mode access
!
interface FastEthernet0/8
 switchport access vlan 60
 switchport mode access
!
interface FastEthernet0/9
 switchport access vlan 60
 switchport mode access
!
```

```
interface FastEthernet0/10
 switchport mode trunk
!
interface FastEthernet0/11
!
interface FastEthernet0/12
!
interface FastEthernet0/13
!
interface FastEthernet0/14
!
interface FastEthernet0/15
!
interface FastEthernet0/16
!
interface FastEthernet0/17
!
interface FastEthernet0/18
!
interface FastEthernet0/19
!
interface FastEthernet0/20
!
interface FastEthernet0/21
!
interface FastEthernet0/22
!
interface FastEthernet0/23
!
interface FastEthernet0/24
```

```
!
interface GigabitEthernet0/1
!
interface GigabitEthernet0/2
!
interface Vlan1
 no ip address
 shutdown
!
interface Vlan50
 ip address 192.168.50.2 255.255.255.0
!
!
!
!
line con 0
!
line vty 0 4
 login local
 transport input ssh
line vty 5 15
 login
!
!
!
!
end


SW2#
```

```
SW2#

SW2#

SW2#

SW2#

SW2#

SW2#

SW2#

SW2#

SW2#config t

Enter configuration commands, one per line.  End with CNTL/Z.

SW2(config)#ip default-gatway 192.168.50.1

             ^

% Invalid input detected at '^' marker.


SW2(config)#ip default-gateway 192.168.50.1

SW2(config)#

SW2(config)#^Z

      ^

% Invalid input detected at '^' marker.


SW2(config)#

SW2(config)#ip default-gateway 192.168.50.1

SW2(config)#

SW2(config)#

SW2(config)#*z

      ^

% Invalid input detected at '^' marker.


SW2(config)#^z

      ^
```

% Invalid input detected at '^' marker.

SW2(config)#wr

        ^

% Invalid input detected at '^' marker.

SW2(config)#ip de

% Incomplete command.

SW2(config)#ip default-gateway 192.168.50.1

SW2(config)#^Z

SW2#

%SYS-5-CONFIG_I: Configured from console by console

SW2#wr

Building configuration...

[OK]

SW2#

SW2#

SW2#

R3>

R3>en

Password:

R3#sh run

Building configuration...

Current configuration : 1575 bytes

!

version 15.1

```
no service timestamps log datetime msec
no service timestamps debug datetime msec
no service password-encryption
!
hostname R3
!
!
!
enable password abc
!
!
ip dhcp excluded-address 192.168.70.1
ip dhcp excluded-address 192.168.80.1
!
ip dhcp pool vlan70
 network 192.168.70.0 255.255.255.0
 default-router 192.168.70.1
 dns-server 8.8.8.8
ip dhcp pool vlan80
 network 192.168.80.0 255.255.255.0
 default-router 192.168.80.1
 dns-server 8.8.8.8
 domain-name wr
!
!
!
no ip cef
no ipv6 cef
!
!
```

!

username abc password 0 abc

!

!

license udi pid CISCO2811/K9 sn FTX101792KA-

!

!

!

!

!

!

!

!

!

ip ssh version 2

ip domain-name abc

!

!

spanning-tree mode pvst

!

!

!

!

!

!

interface FastEthernet0/0

 ip address 192.168.13.3 255.255.255.0

 duplex auto

 speed auto

!

```
interface FastEthernet0/1
 ip address 192.168.23.3 255.255.255.0
 duplex auto
 speed auto
!
interface FastEthernet1/0
 no ip address
 duplex auto
 speed auto
!
interface FastEthernet1/0.70
 encapsulation dot1Q 70
 ip address 192.168.70.1 255.255.255.0
!
interface FastEthernet1/0.80
 encapsulation dot1Q 80
 ip address 192.168.80.1 255.255.255.0
!
interface FastEthernet1/1
 no ip address
 duplex auto
 speed auto
 shutdown
!
interface Vlan1
 no ip address
 shutdown
!
router ospf 1
 log-adjacency-changes
```

```
  network 192.168.70.0 0.0.0.255 area 0

  network 192.168.80.0 0.0.0.255 area 0

  network 192.168.13.0 0.0.0.255 area 0

  network 192.168.23.0 0.0.0.255 area 0

!

ip classless

!

ip flow-export version 9

!

!

!

!

!

!

!

line con 0

!

line aux 0

!

line vty 0 4

 login local

 transport input ssh

!

!

!

end



R3#
R3#
```

R3#

R3#config t

Enter configuration commands, one per line. End with CNTL/Z.

R3(config)#no ip dhcp excluded-address 192.168.70.1

R3(config)#ip dhcp excluded-address 192.168.70.1 192.168.70.10

R3(config)#do wr

Building configuration...

[OK]

R3(config)#

R3(config)#

SW3>

SW3>

SW3>en

Password:

SW3#config t

Enter configuration commands, one per line. End with CNTL/Z.

SW3(config)#int vlan 70

SW3(config-if)#

%LINK-5-CHANGED: Interface Vlan70, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface Vlan70, changed state to up

SW3(config-if)#ip add 192.168.70.2 255.255.255.0

SW3(config-if)#no sh

SW3(config-if)#exit

SW3(config)#

SW3(config)#do sh ip int br

Interface	IP-Address	OK? Method Status	Protocol
FastEthernet0/1	unassigned	YES manual up	up
FastEthernet0/2	unassigned	YES manual up	up
FastEthernet0/3	unassigned	YES manual up	up
FastEthernet0/4	unassigned	YES manual up	up
FastEthernet0/5	unassigned	YES manual up	up
FastEthernet0/6	unassigned	YES manual up	up
FastEthernet0/7	unassigned	YES manual up	up
FastEthernet0/8	unassigned	YES manual down	down
FastEthernet0/9	unassigned	YES manual down	down
FastEthernet0/10	unassigned	YES manual down	down
FastEthernet0/11	unassigned	YES manual up	up
FastEthernet0/12	unassigned	YES manual down	down
FastEthernet0/13	unassigned	YES manual down	down
FastEthernet0/14	unassigned	YES manual down	down
FastEthernet0/15	unassigned	YES manual down	down
FastEthernet0/16	unassigned	YES manual down	down
FastEthernet0/17	unassigned	YES manual down	down
FastEthernet0/18	unassigned	YES manual down	down
FastEthernet0/19	unassigned	YES manual down	down
FastEthernet0/20	unassigned	YES manual down	down
FastEthernet0/21	unassigned	YES manual down	down
FastEthernet0/22	unassigned	YES manual down	down
FastEthernet0/23	unassigned	YES manual down	down
FastEthernet0/24	unassigned	YES manual down	down
GigabitEthernet0/1	unassigned	YES manual down	down
GigabitEthernet0/2	unassigned	YES manual down	down
Vlan1	unassigned	YES manual administratively down	down
Vlan70	192.168.70.2	YES manual up	up

SW3(config)#

SW3(config)#

SW3(config)#

SW3(config)#

SW3(config)#ip default-gateway 192.168.70.1

SW3(config)#enable password abc

SW3(config)#username abc password abc

SW3(config)#ip domain-name abc

SW3(config)#crypto key generate rsa

The name for the keys will be: SW3.abc

Choose the size of the key modulus in the range of 360 to 4096 for your

  General Purpose Keys. Choosing a key modulus greater than 512 may take

  a few minutes.

How many bits in the modulus [512]: 2024

% Generating 2024 bit RSA keys, keys will be non-exportable...[OK]

SW3(config)#ip ssh version 2

*Mar 1 1:22:22.677: %SSH-5-ENABLED: SSH 1.99 has been enabled

SW3(config)#line vty 0 4

SW3(config-line)#transport input all

SW3(config-line)#transport input ssh

SW3(config-line)#login local

SW3(config-line)#exit

SW3(config)#

SW3(config)#exit

SW3#

%SYS-5-CONFIG_I: Configured from console by console

SW3#sh run

Building configuration...

Current configuration : 1625 bytes

!

version 15.0

no service timestamps log datetime msec

no service timestamps debug datetime msec

no service password-encryption

!

hostname SW3

!

enable password abc

!

!

!

ip ssh version 2

ip domain-name abc

!

username abc privilege 1 password 0 abc

!

!

!

spanning-tree mode pvst

spanning-tree extend system-id

!

interface FastEthernet0/1

 switchport access vlan 70

 switchport mode access

!

interface FastEthernet0/2

 switchport access vlan 70

```
 switchport mode access
!
interface FastEthernet0/3
 switchport access vlan 70
 switchport mode access
!
interface FastEthernet0/4
 switchport access vlan 80
 switchport mode access
!
interface FastEthernet0/5
 switchport access vlan 80
 switchport mode access
!
interface FastEthernet0/6
 switchport access vlan 80
 switchport mode access
!
interface FastEthernet0/7
 switchport mode trunk
!
interface FastEthernet0/8
!
interface FastEthernet0/9
!
interface FastEthernet0/10
!
interface FastEthernet0/11
!
interface FastEthernet0/12
```

!

interface FastEthernet0/13

!

interface FastEthernet0/14

!

interface FastEthernet0/15

!

interface FastEthernet0/16

!

interface FastEthernet0/17

!

interface FastEthernet0/18

!

interface FastEthernet0/19

!

interface FastEthernet0/20

!

interface FastEthernet0/21

!

interface FastEthernet0/22

!

interface FastEthernet0/23

!

interface FastEthernet0/24

!

interface GigabitEthernet0/1

!

interface GigabitEthernet0/2

!

interface Vlan1

```
 no ip address
 shutdown
!
interface Vlan70
 ip address 192.168.70.2 255.255.255.0
!
ip default-gateway 192.168.70.1
!
!
!
!
line con 0
!
line vty 0 4
 login local
 transport input ssh
line vty 5 15
 login
!
!
!
!
end


SW3#
SW3#
SW3#
SW3#wr
Building configuration...
```

[OK]

SW3#

SW3#