**Configuration Routers :**

Router Main Campus:

Router#conf t

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

Router(config)#hostname MAIN

MAIN(config)#

MAIN(config)#interface GigabitEthernet0/0

MAIN(config-if)#no sh

MAIN(config-if)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

MAIN(config-if)#int s0/0/0

MAIN(config-if)#no sh

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to down

MAIN(config-if)#int s0/0/1

MAIN(config-if)#no sh

%LINK-5-CHANGED: Interface Serial0/0/1, changed state to down

MAIN(config)#interface Serial0/0/0

MAIN(config-if)#clock rate 64000

MAIN(config-if)#

MAIN(config-if)#exit

MAIN(config)#interface Serial0/0/1

MAIN(config-if)#clock rate 64000

MAIN(config)#int s0/0/0

MAIN(config-if)#ip add 10.10.10.5 255.255.255.252

MAIN(config-if)#int s0/0/1

MAIN(config-if)#ip add 10.10.10.1 255.255.255.252

MAIN(config)#int g0/0.10

MAIN(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.10, changed state to up

MAIN(config-subif)#encapsulation dot1Q 10

MAIN(config-subif)#ip add 192.168.1.1 255.255.255.0

MAIN(config-subif)#int g0/0.20

MAIN(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.20, changed state to up

MAIN(config-subif)#encapsulation dot1Q 20

MAIN(config-subif)#ip add 192.168.2.1 255.255.255.0

MAIN(config-subif)#int g0/0.30

MAIN(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.30, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.30, changed state to up

MAIN(config-subif)#encapsulation dot1Q 30

MAIN(config-subif)#ip add 192.168.3.1 255.255.255.0

MAIN(config-subif)#int g0/0.40

MAIN(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.40, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.40, changed state to up

MAIN(config-subif)#encapsulation dot1Q 40

MAIN(config-subif)#ip add 192.168.4.1 255.255.255.0

MAIN(config-subif)#int g0/0.50

MAIN(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.50, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.50, changed state to up

MAIN(config-subif)#encapsulation dot1Q 50

MAIN(config-subif)#ip add 192.168.5.1 255.255.255.0

MAIN(config-subif)#int g0/0.60

MAIN(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.60, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.60, changed state to up

MAIN(config-subif)#encapsulation dot1Q 60

MAIN(config-subif)#ip add 192.168.6.1 255.255.255.0

MAIN(config-subif)#int g0/0.70

MAIN(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.70, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.70, changed state to up

int g0/0.70

MAIN(config-subif)#encapsulation dot1Q 70

MAIN(config-subif)#ip add 192.168.7.1 255.255.255.0

MAIN(config-subif)#int g0/0.80

MAIN(config-subif)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0.80, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0.80, changed state to up

MAIN(config-subif)#encapsulation dot1Q 80

MAIN(config-subif)#ip add 192.168.8.1 255.255.255.0

MAIN(config-subif)#ex

MAIN(config)#service dhcp

MAIN(config)#ip dhcp pool Admin

MAIN(dhcp-config)#network 192.168.1.0 255.255.255.0

MAIN(dhcp-config)#default-router 192.168.1.1

MAIN(dhcp-config)#dns-server 192.168.1.1

MAIN(dhcp-config)#ip dhcp pool HR

MAIN(dhcp-config)#network 192.168.2.0 255.255.255.0

MAIN(dhcp-config)#default-router 192.168.2.1

MAIN(dhcp-config)#dns-server 192.168.2.1

MAIN(dhcp-config)#ip dhcp pool Finance

MAIN(dhcp-config)#network 192.168.3.0 255.255.255.0

MAIN(dhcp-config)#default-router 192.168.3.1

MAIN(dhcp-config)#dns-server 192.168.3.1

MAIN(dhcp-config)#ip dhcp pool Business

MAIN(dhcp-config)#network 192.168.4.0 255.255.255.0

MAIN(dhcp-config)#default-router 192.168.4.1

MAIN(dhcp-config)#dns-server 192.168.4.1

MAIN(dhcp-config)#ip dhcp pool Engineering/Computing

MAIN(dhcp-config)#network 192.168.5.0 255.255.255.0

MAIN(dhcp-config)#default-router 192.168.5.1

MAIN(dhcp-config)#dns-server 192.168.5.1

MAIN(dhcp-config)#ip dhcp pool Art/Design

MAIN(dhcp-config)#network 192.168.6.0 255.255.255.0

MAIN(dhcp-config)#default-router 192.168.6.1

MAIN(dhcp-config)#dns-server 192.168.6.1

MAIN(dhcp-config)#ip dhcp pool IT

MAIN(dhcp-config)#network 192.168.8.0 255.255.255.0

MAIN(dhcp-config)#default-router 192.168.8.1

MAIN(dhcp-config)#dns-server 192.168.8.1

MAIN(dhcp-config)#ip dhcp pool S.Labs

MAIN(dhcp-config)#network 192.168.7.0 255.255.255.0

MAIN(dhcp-config)#default-router 192.168.7.1

MAIN(dhcp-config)#dns-server 192.168.7.1

MAIN(dhcp-config)#

MAIN(config)#router rip

MAIN(config-router)#version 2

MAIN(config-router)#network 10.10.10.0

MAIN(config-router)#network 10.10.10.4

MAIN(config-router)#network 192.168.1.0

MAIN(config-router)#network 192.168.2.0

MAIN(config-router)#network 192.168.3.0

MAIN(config-router)#network 192.168.4.0

MAIN(config-router)#network 192.168.5.0

MAIN(config-router)#network 192.168.6.0

MAIN(config-router)#network 192.168.7.0

MAIN(config-router)#network 192.168.8.0

Router Cloud:

Router#conf t

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

Router(config)#hostname Cloud

Cloud(config)#int g0/0

Cloud(config-if)#no sh

Cloud(config-if)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface GigabitEthernet0/0, changed state to up

int s0/0/0

Cloud(config-if)#no sh

Cloud(config-if)#

%LINK-5-CHANGED: Interface Serial0/0/0, changed state to up

Cloud(config-if)#

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/0, changed state to up

Cloud(config)#int s0/0/0

Cloud(config-if)#ip add 10.10.10.6 255.255.255.252

Cloud(config-if)#int g0/0

Cloud(config-if)#ip add 20.0.0.1 255.255.255.252

Cloud(config)#router rip

Cloud(config-router)#version 2

Cloud(config-router)#network 20.0.0.0

Cloud(config-router)#network 10.10.10.4

Router Branch Campus:

Router>en

Router#conf t

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

Router(config)#hostname BRANCH

BRANCH(config)#int g0/0

BRANCH(config-if)#no sh

BRANCH(config-if)#

%LINK-5-CHANGED: Interface GigabitEthernet0/0, changed state to up

BRANCH(config-if)#int s0/0/1

BRANCH(config-if)#no sh

BRANCH(config-if)#

%LINK-5-CHANGED: Interface Serial0/0/1, changed state to up

BRANCH(config-if)#

%LINEPROTO-5-UPDOWN: Line protocol on Interface Serial0/0/1, changed state to up

BRANCH(config)#int s0/0/1

BRANCH(config-if)#ip add 10.10.10.2 255.255.255.252

BRANCH(config)#int g0/0.90

BRANCH(config-subif)#encapsulation dot1Q 90

BRANCH(config-subif)#ip add 192.168.9.1 255.255.255.0

BRANCH(config-subif)#int g0/0.100

BRANCH(config-subif)#encapsulation dot1Q 100

BRANCH(config-subif)#ip add 192.168.10.1 255.255.255.0

BRANCH(config)#service dhcp

BRANCH(config)#ip dhcp pool Staff

BRANCH(dhcp-config)#network 192.168.9.0 255.255.255.0

BRANCH(dhcp-config)#default-router 192.168.9.1

BRANCH(dhcp-config)#dns-server 192.168.9.1

BRANCH(dhcp-config)#ip dhcp pool Branch\_S.Labs

BRANCH(dhcp-config)#network 192.168.10.0 255.255.255.0

BRANCH(dhcp-config)#default-router 192.168.10.1

BRANCH(dhcp-config)#dns-server 192.168.10.1

BRANCH(dhcp-config)#

BRANCH(config)#router rip

BRANCH(config-router)#version 2

BRANCH(config-router)#network 192.168.9.0

BRANCH(config-router)#network 192.168.10.0

BRANCH(config-router)#network 10.10.10.0

BRANCH(config-router)#

**Configuration Switches:**

Switch Admin:

Switch>en

Switch#conf t

Switch(config)#hostname Admin

Admin(config)#int range f0/1-24

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

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

% Access VLAN does not exist. Creating vlan 10

Admin(config-if-range)#

Switch HR:

Switch>en

Switch#conf t

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

Switch(config)#hostname HR

HR(config)#int range fa0/1-24

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

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

% Access VLAN does not exist. Creating vlan 20

HR(config-if-range)#

Switch Finance:

Switch>en

Switch#conf t

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

Switch(config)#hostname Finance

Finance(config)#int range fa0/1-24

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

Finance(config-if-range)#switchport access

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

% Access VLAN does not exist. Creating vlan 30

Finance(config-if-range)#

Switch Business:

Switch>en

Switch#conf t

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

Switch(config)#hostname Business

Business(config)#int range fa0/1-24

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

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

% Access VLAN does not exist. Creating vlan 40

Business(config-if-range)#

Switch Engineering/Computing:

Switch>en

Switch#conf t

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

Switch(config)#hostname Eng/Com

Eng/Com(config)#int range fa0/1-24

Eng/Com(config-if-range)#switchport mode access

Eng/Com(config-if-range)#sw

Eng/Com(config-if-range)#switchport a

Eng/Com(config-if-range)#switchport access

Eng/Com(config-if-range)#switchport access vlan 50

% Access VLAN does not exist. Creating vlan 50

Eng/Com(config-if-range)#

Switch Art/Design:

Switch>en

Switch#conf t

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

Switch(config)#hostname Art/Design

Art/Design(config)#int rang

Art/Design(config)#int range fa0/1-24

Art/Design(config-if-range)#switchport mode access

Art/Design(config-if-range)#switchport access vlan 60

% Access VLAN does not exist. Creating vlan 60

Art/Design(config-if-range)#

Switch Students’ Labs:

Switch>en

Switch#conf t

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

Switch(config)#hostname S.Labs

S.Labs(config)#int range fa0/1-24

S.Labs(config-if-range)#switchport mode access

S.Labs(config-if-range)#switchport access vlan 70

% Access VLAN does not exist. Creating vlan 70

S.Labs(config-if-range)#

Switch IT :

Switch>en

Switch#conf t

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

Switch(config)#hostname IT

IT(config)#int range fa0/1-24

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

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

% Access VLAN does not exist. Creating vlan 80

IT(config-if-range)#

Switch Main Layer3:

Switch>en

Switch#conf t

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

Switch(config)#hos

Switch(config)#hostname MAIN

MAIN(config)#

MAIN(config)#int gig1/0/2

MAIN(config-if)#switchport mode access

MAIN(config-if)#switchport access vlan 10

% Access VLAN does not exist. Creating vlan 10

MAIN(config-if)#int gig1/0/3

MAIN(config-if)#switchport mode access

MAIN(config-if)#switchport access vlan 20

% Access VLAN does not exist. Creating vlan 20

MAIN(config-if)#int gig1/0/4

MAIN(config-if)#switchport mode access

MAIN(config-if)#switchport access vlan 30

% Access VLAN does not exist. Creating vlan 30

MAIN(config-if)#int gig1/0/5

MAIN(config-if)#switchport mode access

MAIN(config-if)#switchport access vlan 40

% Access VLAN does not exist. Creating vlan 40

MAIN(config-if)#int gig1/0/6

MAIN(config-if)#switchport mode access

MAIN(config-if)#switchport access vlan 50

% Access VLAN does not exist. Creating vlan 50

MAIN(config-if)#int gig1/0/7

MAIN(config-if)#switchport mode access

MAIN(config-if)#switchport access vlan 60

% Access VLAN does not exist. Creating vlan 60

MAIN(config-if)#int gig1/0/8

MAIN(config-if)#switchport mode access

MAIN(config-if)#switchport access vlan 70

% Access VLAN does not exist. Creating vlan 70

%CDP-4-NATIVE\_VLAN\_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet1/0/9 (1), with IT

MAIN(config-if)#int gig1/0/9

MAIN(config-if)#switchport mode access

MAIN(config-if)#switchport access vlan 80

% Access VLAN does not exist. Creating vlan 80

MAIN(config)#int g1/0/1

MAIN(config-if)#switchport trunk encapsulation dot1q

MAIN(config-if)#switchport mode trunk

**Branch Campus:**

Switch Staff:

Switch>en

Switch#conf t

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

Switch(config)#hostname Staff

Staff(config)#int range fa0/1-24

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

Staff(config-if-range)#switchport access vlan 90

% Access VLAN does not exist. Creating vlan 90

Staff(config-if-range)#

Switch Students’ Labs:

Switch>en

Switch#conf t

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

Switch(config)#

Switch(config)#hostname BRANCH\_S.Labs

BRANCH\_S.Labs(config)#int range fa0/1-24

BRANCH\_S.Labs(config-if-range)#switchport mode access

BRANCH\_S.Labs(config-if-range)#switchport access vlan 100

% Access VLAN does not exist. Creating vlan 100

BRANCH\_S.Labs(config-if-range)#

Switch Layer3 Branch:

Switch>en

Switch#conf t

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

Switch(config)#hostname Branch

Branch(config)#int g1/0/3

Branch(config-if)#switchport mode access

Branch(config-if)#switchport access vlan 100

% Access VLAN does not exist. Creating vlan 100

Branch(config-if)#int g1/0/

%CDP-4-NATIVE\_VLAN\_MISMATCH: Native VLAN mismatch discovered on GigabitEthernet1/0/2 (1), with Staff FastEthernet0

Branch(config-if)#

Branch(config-if)#int g1/0/2

Branch(config-if)#switchport mode access

Branch(config-if)#switchport access vlan 90

% Access VLAN does not exist. Creating vlan 90

Branch(config-if)#int g1/0/1

Branch(config-if)#switchport trunk encapsulation dot1q

Branch(config-if)#switchport mode trunk