

Configuration of Switches:

SWITCH SW1:

```
conf t
```

```
int Fa1/0
```

```
switchport mode trunk
```

```
switchport trunk encapsulation dot1q
```

```
exit
```

```
int Fa1/4
```

```
switchport mode trunk
```

```
switchport trunk encapsulation dot1q
```

```
exit
```

```
int Fa1/5
```

```
switchport mode trunk
```

```
switchport trunk encapsulation dot1q
```

```
exit
```

```
int Fa1/1
```

```
switchport mode access
```

```
switchport access vlan 2
```

```
exit
```

```
int Fa1/2
```

```
switchport mode access
```

```
switchport access vlan 2
```

```
exit
```

```
int Fa1/3
```

```
switchport mode access
```

```
switchport access vlan 2
```

```
exit
```

```
int Fa1/4
switchport access vlan 3
end
```

SWITCH SW2:

```
conf t

int Fa1/4

switchport mode trunk

switchport trunk encapsulation dot1q

exit

int Fa1/1

switchport mode access

switchport access vlan 3

exit

int Fa1/2

switchport mode access

switchport access vlan 3

exit

int Fa1/3

switchport mode access

switchport access vlan 3

exit
```

```
int Fa1/4
```

```
switchport access vlan 2
```

```
end
```

SWITCH SW3:

```
conf t
```

```
int Fa1/5
```

```
switchport mode trunk
```

```
switchport trunk encapsulation dot1q
```

```
exit
```

```
int Fa1/1
```

```
switchport mode access
```

```
switchport access vlan 4
```

```
exit
```

```
int Fa1/2
```

```
switchport mode access
```

```
switchport access vlan 4
```

```
exit
```

```
int Fa1/3
```

```
switchport mode access
```

```
switchport access vlan 4
```

```
exit
```

```
int Fa1/5
```

```
switchport access vlan 2
```

```
end
```

Configuration of Router Interface

ROUTER R1:

```
conf t
```

```
int Fa0/0.2
```

```
encapsulation dot1Q 2
```

```
ip address 10.0.2.254 255.255.255.0
```

```
end
```

```
conf t
```

```
int Fa0/0.3
```

```
encapsulation dot1Q 3
```

```
ip address 10.0.3.254 255.255.255.0
```

```
end
```

```
conf t
```

```
int Fa0/0.4
```

```
encapsulation dot1Q 4
```

```
ip address 10.0.4.254 255.255.255.0
```

```
end
```

```
conf t
```

```
int Fa0/0
```

```
no shut
```

```
end
```

Configuration of PC's:

PC1:

```
ip 10.0.2.1/24 10.0.2.254  
save
```

PC2:

```
ip 10.0.2.2/24 10.0.2.254  
save
```

PC3:

```
ip 10.0.2.3/24 10.0.2.254  
save
```

PC4:

```
ip 10.0.3.1/24 10.0.3.254  
save
```

PC5:

```
ip 10.0.3.2/24 10.0.3.254  
save
```

PC6:

```
ip 10.0.3.3/24 10.0.3.254  
save
```

PC7:

```
ip 10.0.4.1/24 10.0.4.254  
save
```

PC8:

```
ip 10.0.4.2/24 10.0.4.254  
save
```

PC9:

ip 10.0.4.3/24 10.0.4.254

save