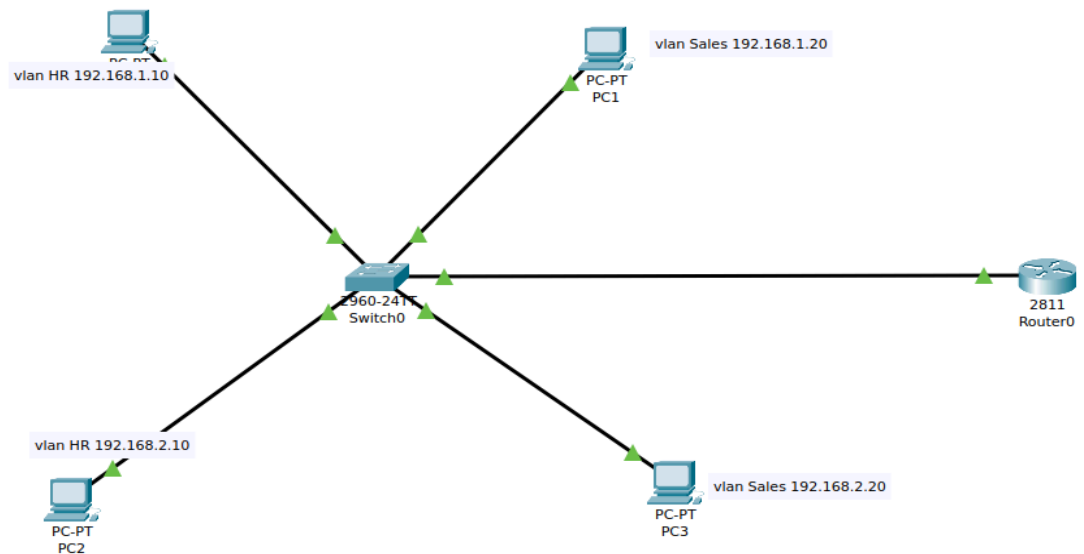


VLAN PROCEDURE

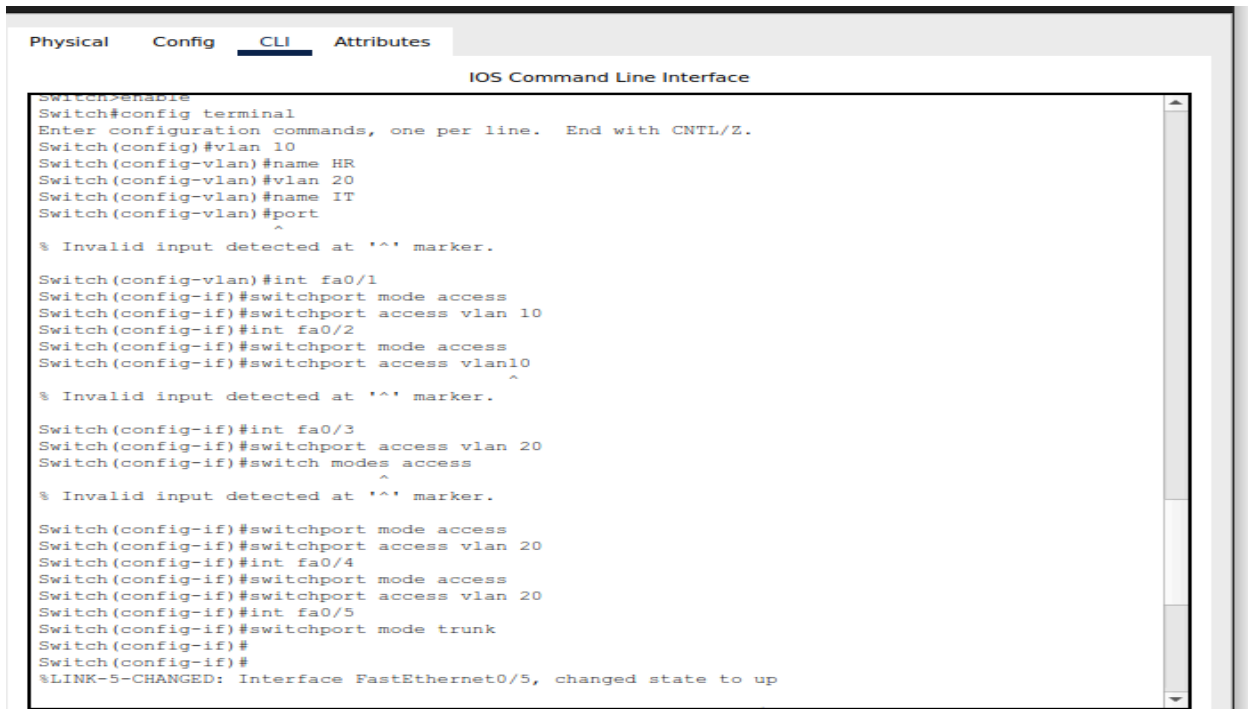
STEPS:

- 1.OPEN CISCO PACKET TRACER
- 2.CONSTRUCT THE VLAN NETWORK NETWORK AS SHOWN IN THE DIAGRAM BELOW.



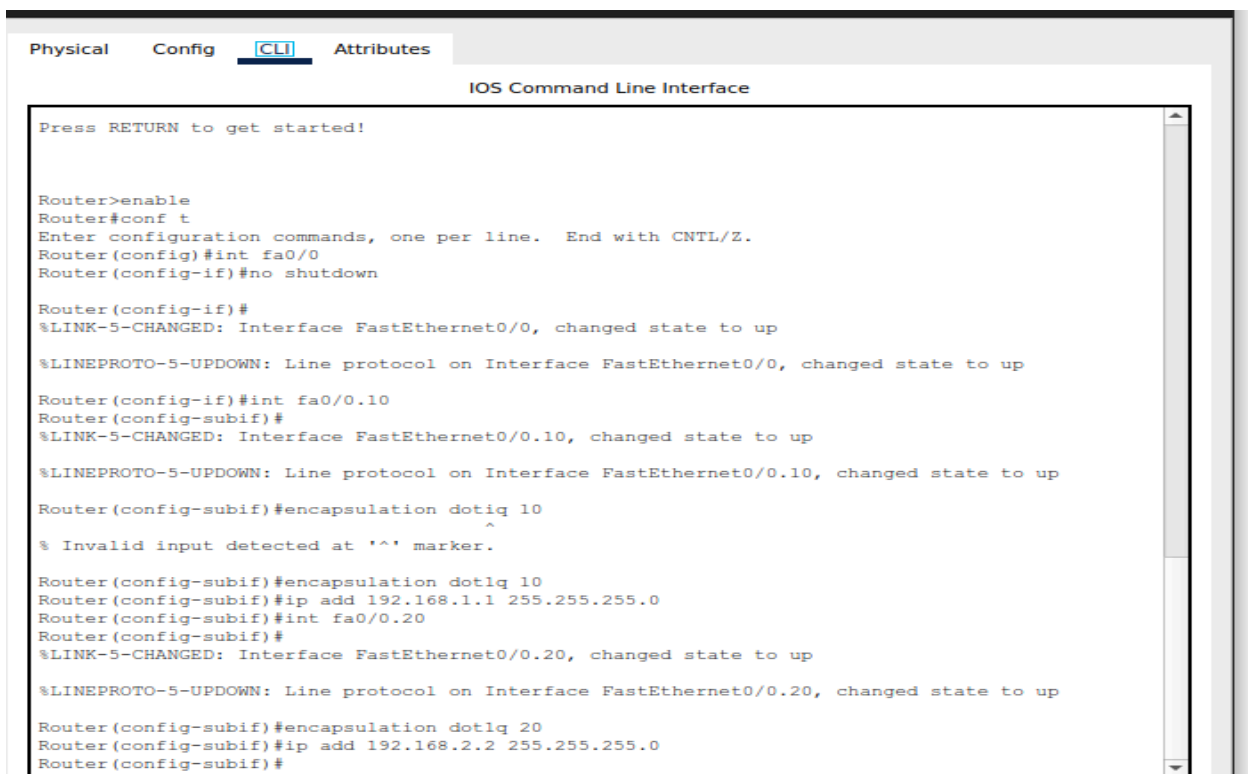
3. CLICK ON EACH PC AND GO THE DESKTOP AND GIVE IP ADDREESS:
ASSIGN IP ADDRESS FOR
PC0: 192.168.1.10 AND GATEWAY AS 192.168.1.1
PC2: IP : 192.168. 2.10 ,GATEWAY :192.168.2.2
PC1: IP:192.168.1.20 GATEWAY : 192.168.1.1
PC3: IP: 192.168.2.20, GATEWAY:192.168.2.2

4. CLICK SWITCH 2960 AND GO TO CLI TO CONFIGURE AS FOLLOWS:



```
Switch>enable
Switch#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name HR
Switch(config-vlan)#vlan 20
Switch(config-vlan)#name IT
Switch(config-vlan)#port
^
% Invalid input detected at '^' marker.
Switch(config-vlan)#int fa0/1
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 10
Switch(config-if)#int fa0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan10
^
% Invalid input detected at '^' marker.
Switch(config-if)#int fa0/3
Switch(config-if)#switchport access vlan 20
Switch(config-if)#switch modes access
^
% Invalid input detected at '^' marker.
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa0/4
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#int fa0/5
Switch(config-if)#switchport mode trunk
Switch(config-if)#
Switch(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/5, changed state to up
```

5. CLICK ON THE ROUTER AND GO TO CLI AND COFIGURE AS FOLLOWS:



```
Router>enable
Router#conf t
Enter configuration commands, one per line. End with CNTL/Z.
Router(config)#int fa0/0
Router(config-if)#no shutdown

Router(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

Router(config-if)#int fa0/0.10
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.10, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.10, changed state to up

Router(config-subif)#encapsulation dotiq 10
^
% Invalid input detected at '^' marker.

Router(config-subif)#encapsulation dotlq 10
Router(config-subif)#ip add 192.168.1.1 255.255.255.0
Router(config-subif)#int fa0/0.20
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.20, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.20, changed state to up

Router(config-subif)#encapsulation dotlq 20
Router(config-subif)#ip add 192.168.2.2 255.255.255.0
Router(config-subif)#
```

6. CLICK ON ANY PC AND CLICK DESKTOP TAB->COMMAND PROMPT AND TYPE ANY IP ADDRESS OF PCS TO ENABLE COMMUNICATION .

EX: PING 192.168.2.20

YOU WILL GET THE OUTPUT AS BELOW

```
C:\>PING 192.168.2.20

Pinging 192.168.2.20 with 32 bytes of data:

Reply from 192.168.2.20: bytes=32 time=6ms TTL=128
Reply from 192.168.2.20: bytes=32 time<1ms TTL=128
Reply from 192.168.2.20: bytes=32 time<1ms TTL=128
Reply from 192.168.2.20: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.2.20:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 6ms, Average = 1ms

C:\>
```