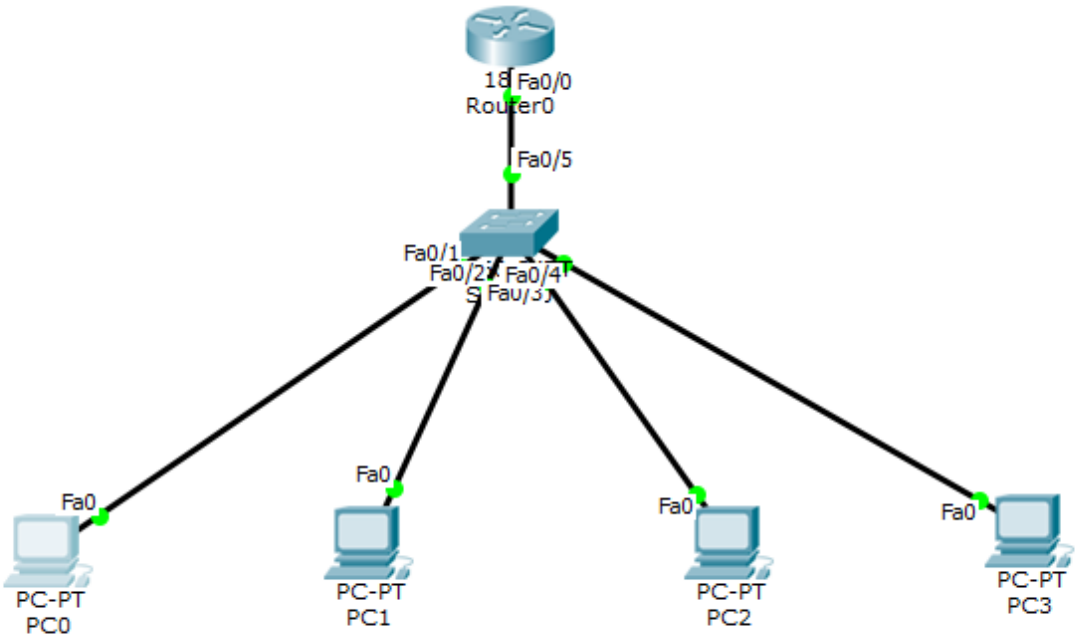
VLAN-Virtual LAN

Construct the topology as shown.
With switch -2960, router 1841



1.Configure the ip addresses and gateway tp PCs.
2.In router configure the left side network (fa 0/0)- 192.168.1.1
3. Go to switch ->config->vlan-database->set vlan name and number
Vlan name can be anything, vlan number is based on the right side network (192.168.20.2) vlan number is 20.
4. Switch->config>fast ethernet 5->trunk(dropdown menu)
5. (For right side systems) Switch ->config->fast ethernet 3->vlan 20
switch->fast ethernet 4-> vlan 20.
6. Go to router cli and type the following commands

```
Router(config)#interface fastEthernet 0/0.1
Router(config-subif)#
%LINK-5-CHANGED: Interface FastEthernet0/0.1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0.1, changed state
to up

Router(config-subif)#encapsulation dot1q 20
Router(config-subif)#ip address 192.168.20.1 255.255.255.0
Router(config-subif)#no shutdown
Router(config-subif)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console
```

Ping the pc

```
PC>ping 192.168.20.2

Pinging 192.168.20.2 with 32 bytes of data:

Reply from 192.168.20.2: bytes=32 time=0ms TTL=127
Reply from 192.168.20.2: bytes=32 time=0ms TTL=127
Reply from 192.168.20.2: bytes=32 time=0ms TTL=127
Reply from 192.168.20.2: bytes=32 time=0ms TTL=127

Ping statistics for 192.168.20.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

PC>
```