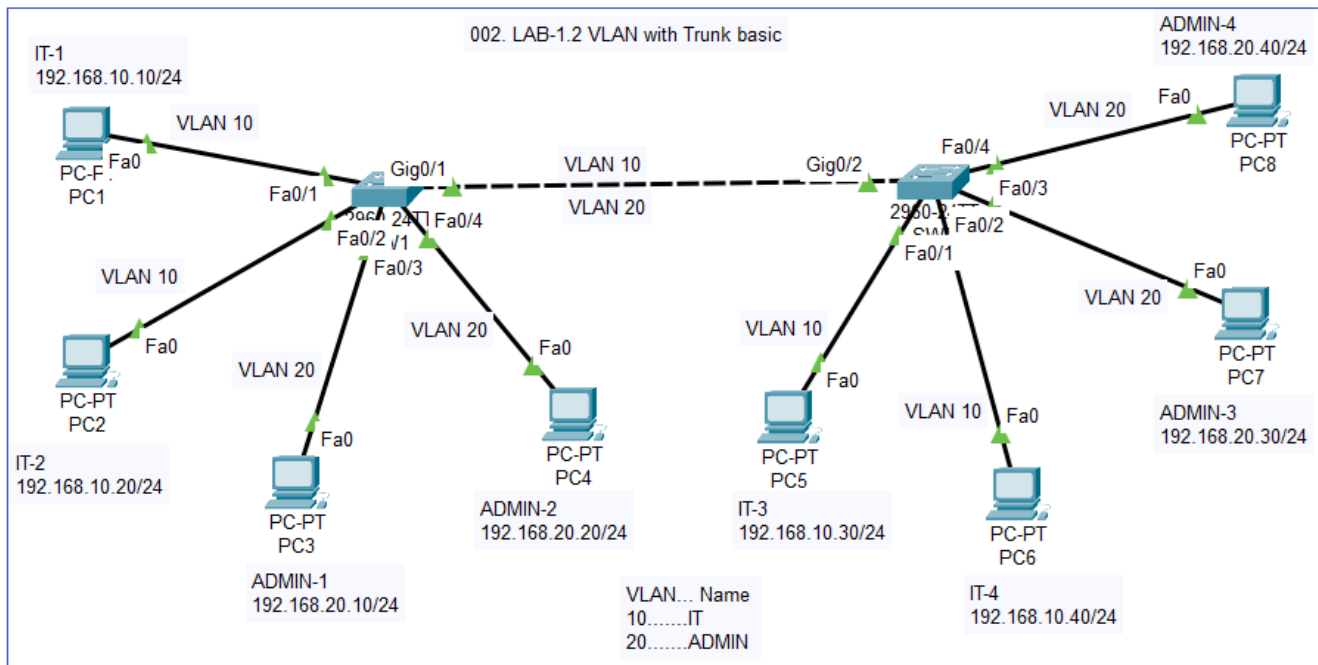## LAB-02. VLAN with Trunk basic:

Step1: Set IP and Subnet mask to all PC ping test each other:
PC1: 192.168.10.10, Subnet mask: 255.255.255.0
PC1: 192.168.10.20, Subnet mask: 255.255.255.0
PC3: 192.168.20.10, Subnet mask: 255.255.255.0
PC4: 192.168.20.20, Subnet mask: 255.255.255.0
PC1: 192.168.10.30, Subnet mask: 255.255.255.0
PC1: 192.168.10.40, Subnet mask: 255.255.255.0
PC3: 192.168.20.30, Subnet mask: 255.255.255.0
PC4: 192.168.20.40, Subnet mask: 255.255.255.0

Step2: VLAN creating into SW1 and SW2 switches:
SW1>enable
SW1#configure terminal
SW1(config)#vlan 10
SW1(config-vlan)#name IT
SW1(config-vlan)#exit
SW1(config)#vlan 20
SW1(config-vlan)#name ADMIN
SW1(config-vlan)#exit
SW1(config)#exit
Sw1#wr

SW2>enable
SW2#configure terminal
SW2(config)#vlan 10
SW2(config-vlan)#name IT
SW2(config-vlan)#exit
SW2(config)#vlan 20

SW2(config-vlan)#name ADMIN
SW2(config-vlan)#exit
SW2(config)#exit
Sw2#wr

Checking:
SW1#show vlan brief
SW2#show vlan brief

Step3: VLAN assign into SW1 and SW2 switches:
SW1#configure terminal
SW1(config)# interface range fastEthernet 0/1, fastEthernet 0/2
SW1(config-if)#switchport mode access
SW1(config-if)#switchport access vlan 10
SW1(config-if)#exit

SW1(config)# interface range fastEthernet 0/3, fastEthernet 0/4
SW1(config-if)#switchport mode access
SW1(config-if)#switchport access vlan 20
SW1(config-if)#exit

SW1(config)#interface GigabitEthernet0/1
SW1(config-if-range)# switchport mode trunk
SW1(config-if-range)# switchport trunk allowed vlan all //Need to mention specific vlan, not all//
SW1(config-if-range)#exit
SW1(config)#exit
SW1#show vlan brief

SW2#configure terminal
SW2(config)# interface range fastEthernet 0/1, fastEthernet 0/2
SW2(config-if)#switchport mode access
SW2(config-if)#switchport access vlan 10
SW2(config-if)#exit

SW2(config)# interface range fastEthernet 0/3, fastEthernet 0/4
SW2(config-if)#switchport mode access
SW2(config-if)#switchport access vlan 20
SW2(config-if)#exit

SW2(config)#interface GigabitEthernet0/2
SW2(config-if-range)# switchport mode trunk
SW2(config-if-range)# switchport trunk allowed vlan all //Need to mention specific vlan, not all//
SW2(config-if-range)#exit
SW2(config)#exit
SW2#show vlan brief

Step4: Ping test between Same VLAN PC:
PC1>ping 192.168.10.40
PC3>ping 192.168.20.40