



SUPERIOR UNIVERSITY

Task no : 12

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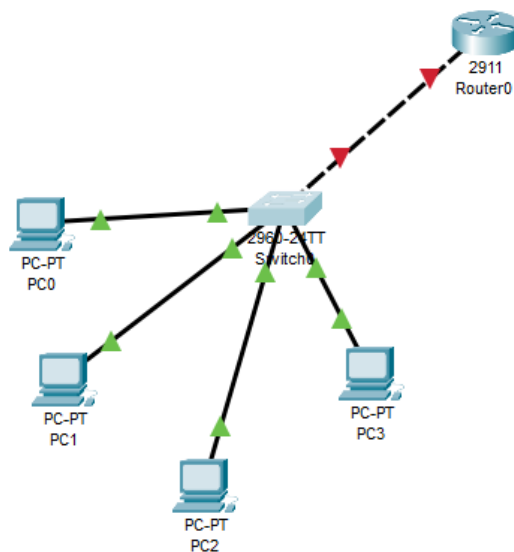
Question no :1

What is difference between “VLAN & Inter-VLAN Routing”, explain with Example (draw structure in cisco)

Answer :

1. VLAN (Virtual Local Area Network):

- A VLAN is a logical grouping of devices on a network that are segmented into separate broadcast domains.
- VLANs help improve network performance and security by isolating traffic between groups of devices.
- Devices in the same VLAN can communicate with each other without a router.

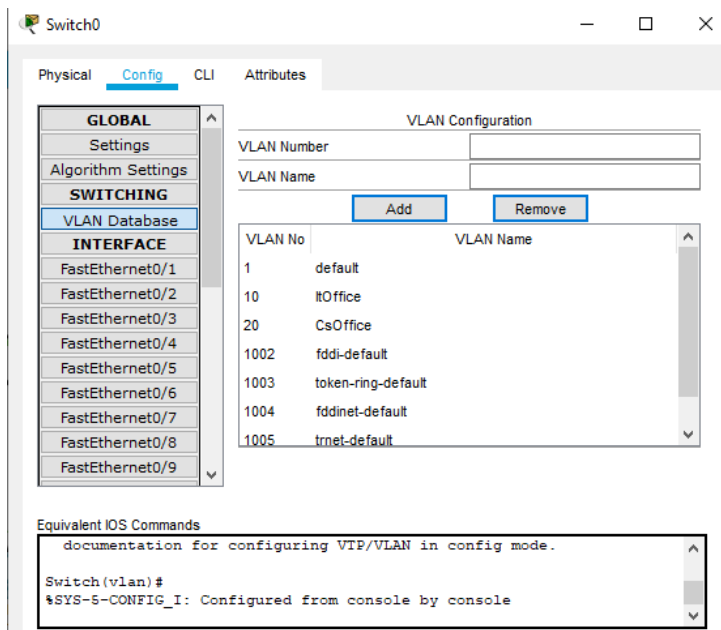


```

Switch>en
Switch#config terminal
Enter configuration commands, one per line. End with CNTL/Z.
Switch(config)#vlan 10
Switch(config-vlan)#name ItOffice
Switch(config-vlan)#int f0/2
Switch(config-if)#switchport mode access
Switch(config-if)#switchport vlan 10 access
Switch(config-if)#
% Invalid input detected at '^' marker.

Switch(config-if)#switchport access vlan 10
Switch(config-if)#exit
Switch(config)#vlan 20
Switch(config-vlan)#name CsOffice
Switch(config-vlan)#int f0/3
Switch(config-if)#switchport mode access
Switch(config-if)#switchport access vlan 20
Switch(config-if)#

```



2. Inter-VLAN Routing:

- Inter-VLAN Routing is the process of forwarding traffic between VLANs using a Layer 3 device (like a router or Layer 3 switch).
- Since VLANs are isolated, devices in different VLANs require a router or a Layer 3 switch to communicate with each other.

