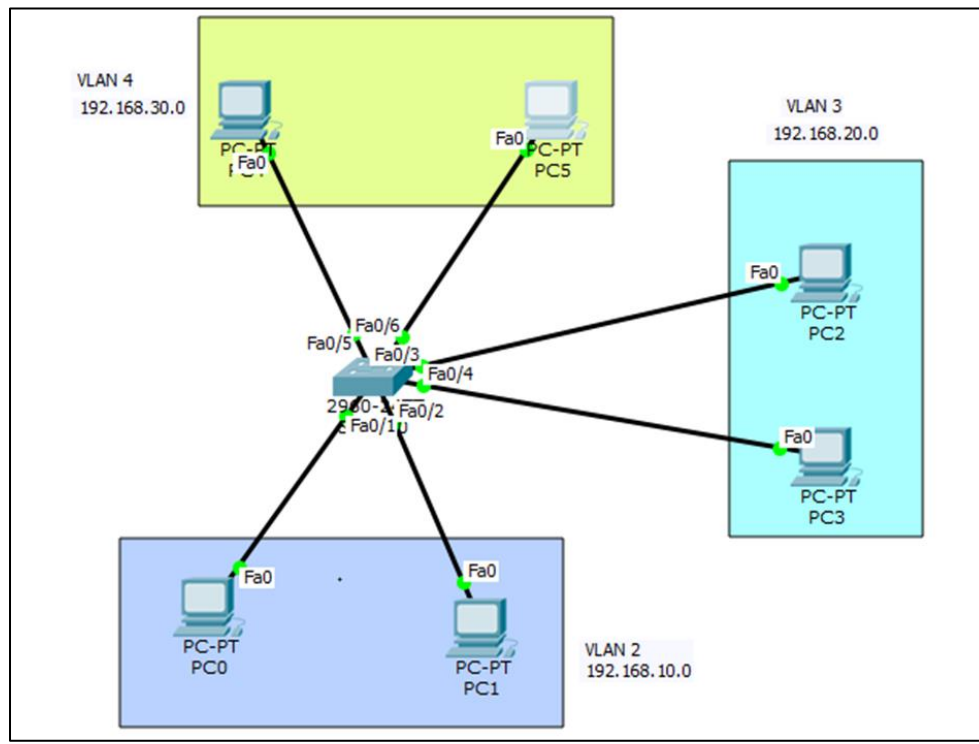# Military Institute of Science and Technology

Department of CSE, CSE 310

VLAN (Virtual Local Area Network)

Problem 1:

Design the following network in packet tracer. Divide the network into mentioned
VLANs and make sure VLANs can not communicate with each other.

Solution:

Step 1: Set the name of VLANs

```
Switch>en
Switch# conf t
Switch(config)# do show vlan
Switch(config)# vlan 2
Switch(config-vlan)#name V2
Switch(config-vlan)#vlan 3
Switch(config-vlan)#name V3
Switch(config-vlan)#vlan 4
Switch(config-vlan)#name V4
```

Switch(config-vlan)#do show vlan
Switch(config-vlan)#exit

Step 2: Implement VLAN on interface

//fast Ethernet access to vlan

Switch(config)#int range f0/1-2
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 2
Switch(config-if-range)#exit

Switch(config)#int range f0/3-4
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 3
Switch(config-if-range)#exit

Switch(config)#int range f0/5-6
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 4
Switch(config-if-range)#exit
Switch(config)#do copy run start

** Then PC configuration

Problem 2: Trunk Link
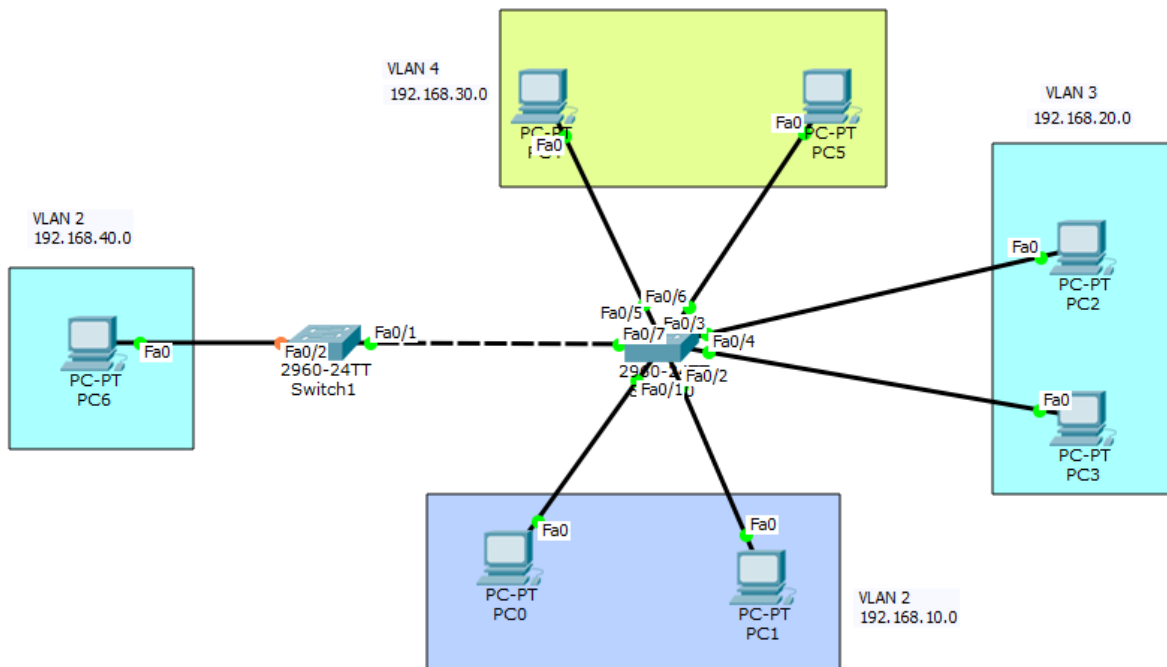
** Complete all the steps of the above problem. Then do the following steps:

Switch 0:

Switch(config)#int f0/7

Switch(config-if)#switchport mode trunk

Switch(config-if)#exit

Switch(config)#do show int trunk

Switch 1:

Switch(config)#int fa 0/1

Switch(config-if)#switchport mode trunk

Switch(config-if)#exit

Switch(config)#do show int trunk