

**Institute of Engineering & Management**  
**Department of Computer Science & Engineering**  
**Network Lab for 3<sup>rd</sup> year 6<sup>th</sup> semester 2019**  
**Code: CS692**

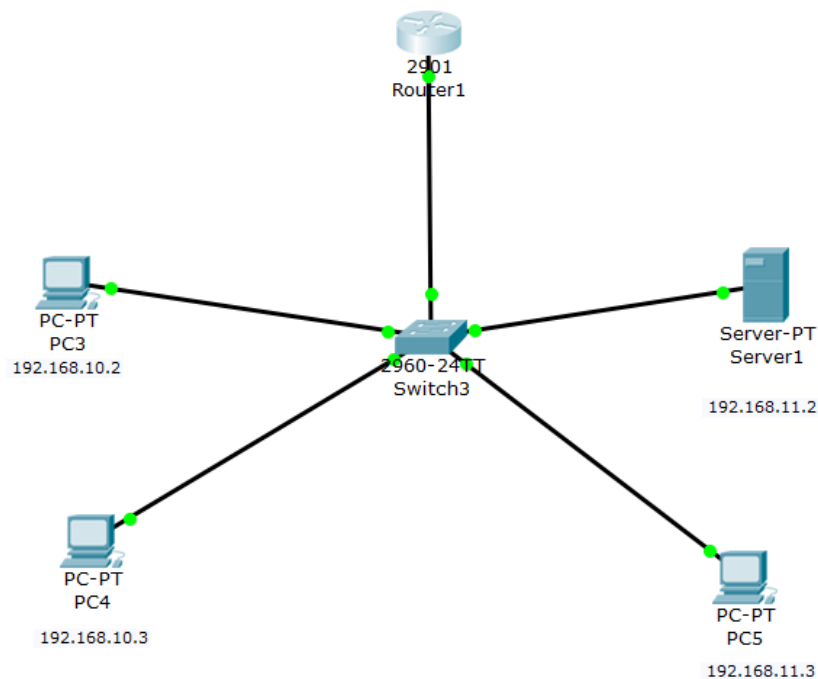
**Date:15/04/19**

**WEEK-8**

**Assignment-1**

**Problem Statement:** Implementation of VLAN.

**Screen-Shot:**



**CLI code:**

**Switch:**

```
Switch>en
Switch#vlan database
Switch(vlan)#vlan 2 name student
VLAN 2 added:
Name: student
Switch(vlan)#vlan 3 name faculty
VLAN 3 added:
Name: faculty
Switch(vlan)#exit
Switch#configure terminal
Switch(config)#interface range fastEthernet 0/1 - fastEthernet 0/2
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 2
Switch(config-if-range)#exit
```

**Name: Ranajit Roy; Roll: 47; Sec: A**

```

Switch(config)#interface range fastEthernet 0/3 - fastEthernet 0/6
Switch(config-if-range)#switchport mode access
Switch(config-if-range)#switchport access vlan 3
Switch(config-if-range)#exit
Switch(config)#exit
Switch#
Switch#showvlan
VLAN Name Status Ports
----
-----
1 default active Fa0/7, Fa0/8, Fa0/9, Fa0/10
Fa0/11, Fa0/12, Fa0/13, Fa0/14
Fa0/15, Fa0/16, Fa0/17, Fa0/18
Fa0/19, Fa0/20, Fa0/21, Fa0/22
Fa0/23, Fa0/24, Gig0/1, Gig0/2
2 student active Fa0/1, Fa0/2
3 faculty active Fa0/3, Fa0/4, Fa0/5, Fa0/6
1002 fddi-default active
1003 token-ring-default active
1004 fddinet-default active
1005 trnet-default active

Switch#config terminal
Switch(config)#interface fastEthernet 0/5
Switch(config-if)#switchport mode trunk
Switch(config-if)#exit

```

## Router:

```

Router>en
Router#configterminal
Router(config)#interface gigabitEthernet 0/0
Router(config-if)#no shutdown
Router(config-if)#exit
Router(config)#interface gigabitEthernet 0/0.1
Router(config-subif)#encapsulation dot1q 2
Router(config-subif)#ip address 192.168.10.1 255.255.255.0
Router(config-subif)#no shutdown
Router(config-subif)#interface gigabitEthernet 0/0.2
Router(config-subif)#encapsulation dot1q 3
Router(config-subif)#ip address 192.168.11.1 255.255.255.0
Router(config-subif)#no shutdown
Router(config-subif)#end
Router#
Router#wr
Building configuration...
[OK]
Router#showip interface brief
Interface IP-Address OK? Method Status Protocol
GigabitEthernet0/0 unassigned YES unset up up
GigabitEthernet0/0.1 192.168.10.1 YES manual up up
GigabitEthernet0/0.2 192.168.11.1 YES manual up up
GigabitEthernet0/1 unassigned YES unset administratively down down
Vlan1 unassigned YES unset administratively down down
Router#

```