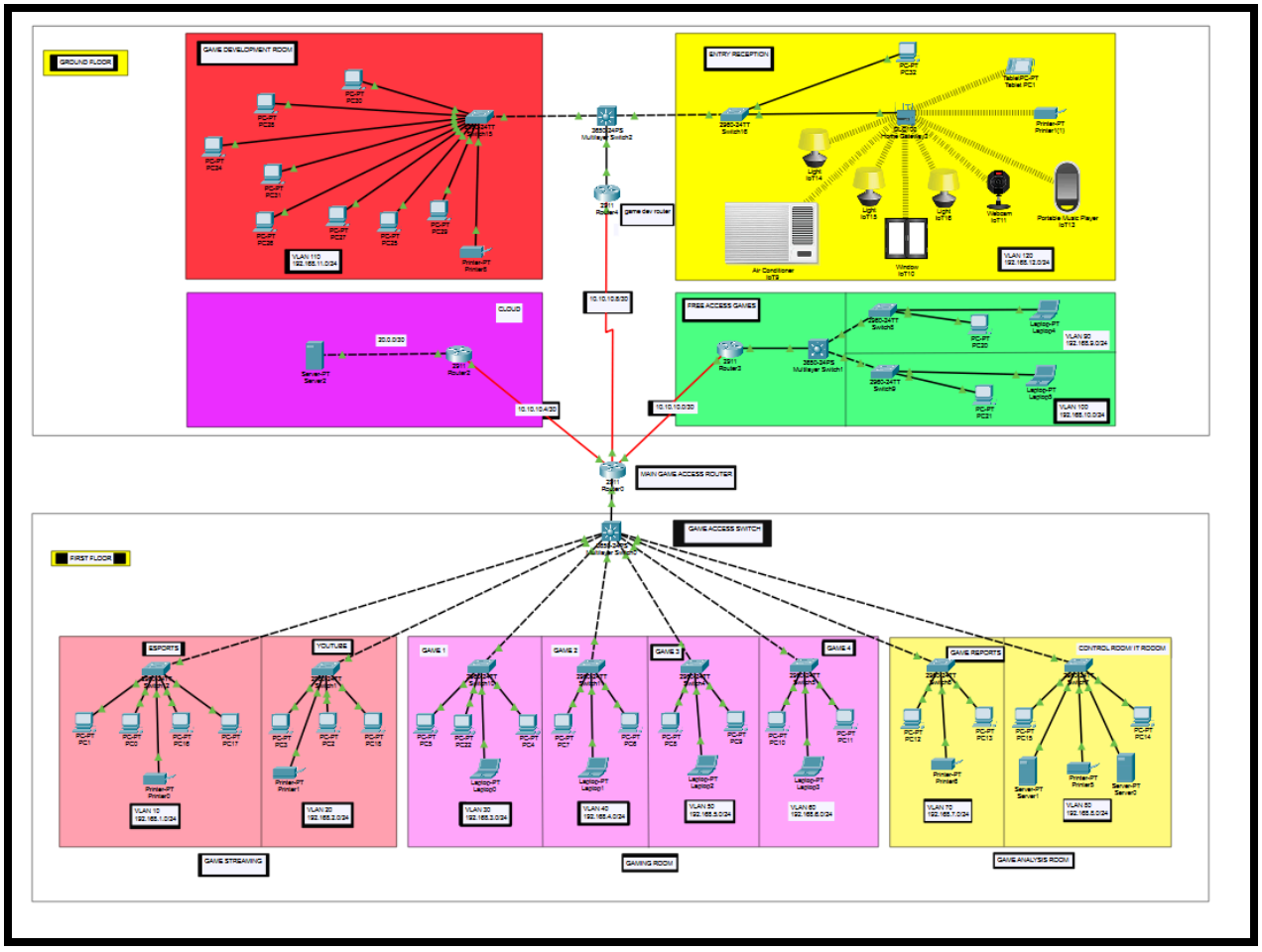
Computer Networks (UE23CS252B) - Mini-Project - Cisco Packet Tracer

GAME NETWORK ZONE

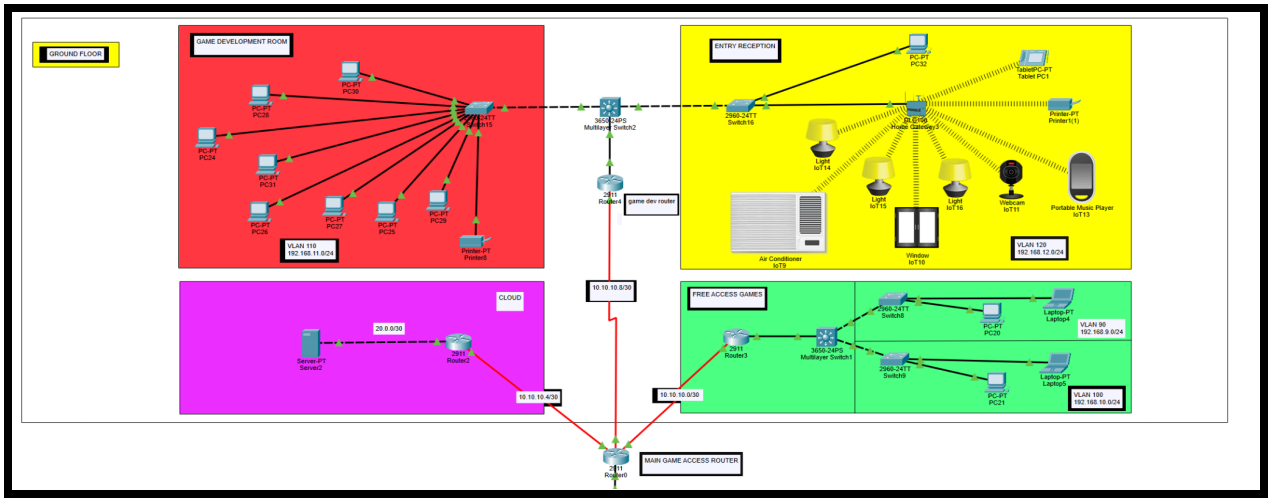
BANANA PROBLEM

RISHAB SHETTY PES1UG23AM918 4TH SEM AIML 'E' SECTION



The Game network Zone **is implemented within a two-floor building, ensuring full connectivity and optimized data transfer through various networking protocols.**

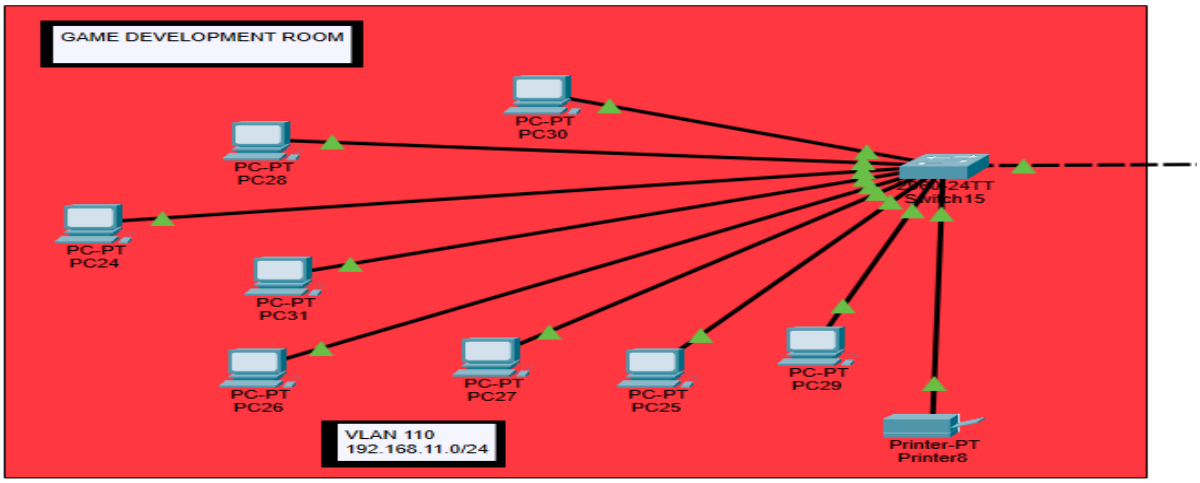
Ground Floor



- **Game Development Department**

VLAN 110

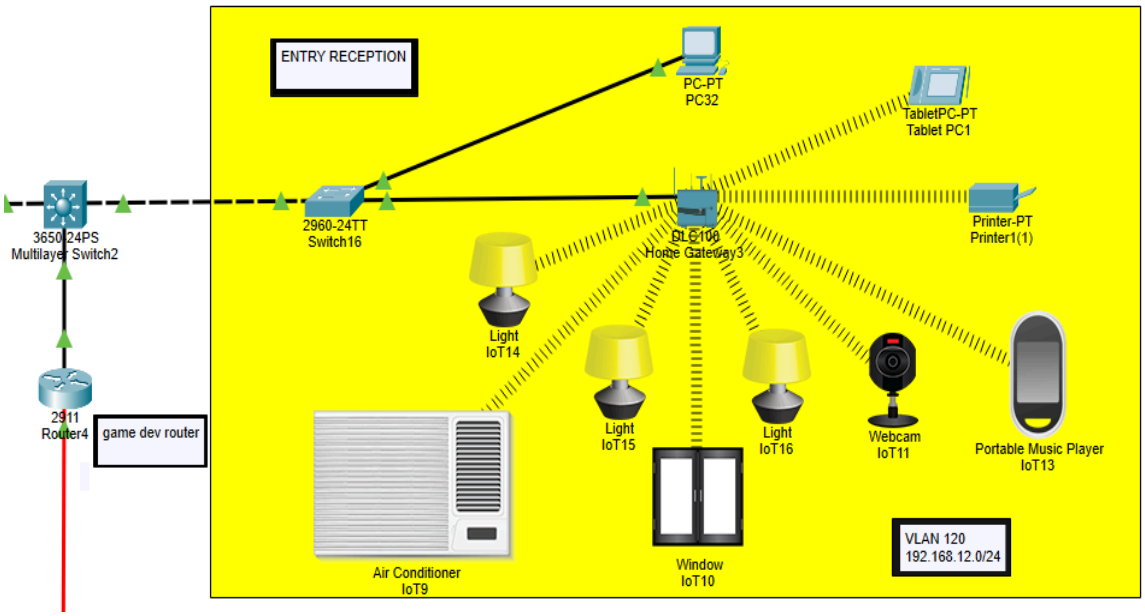
192.168.11.0/24



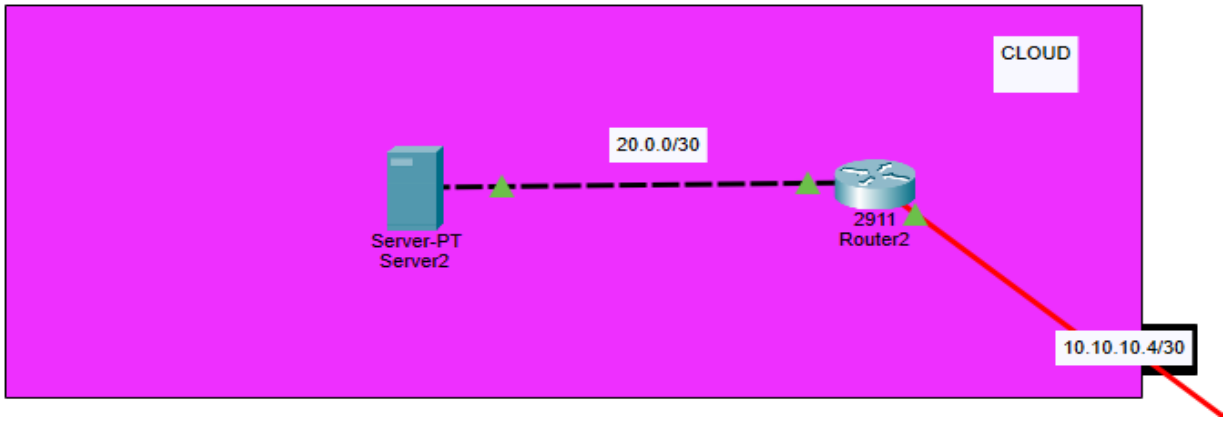
- **Reception Area**

VLAN 120

192.168.12.0/24



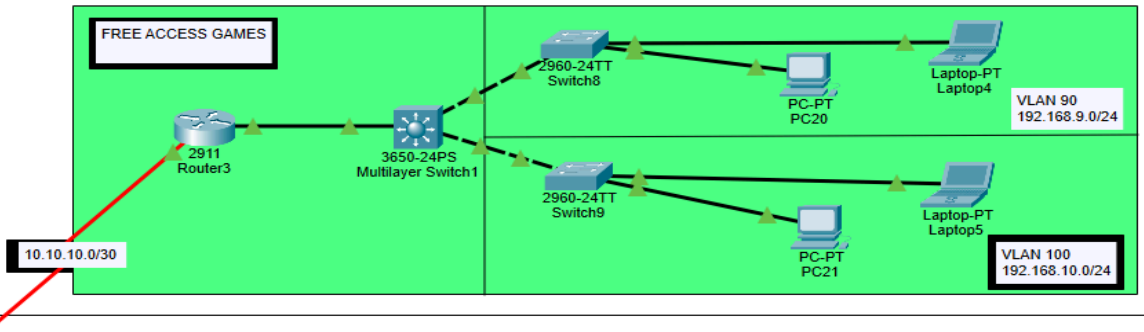
- **Cloud Services**



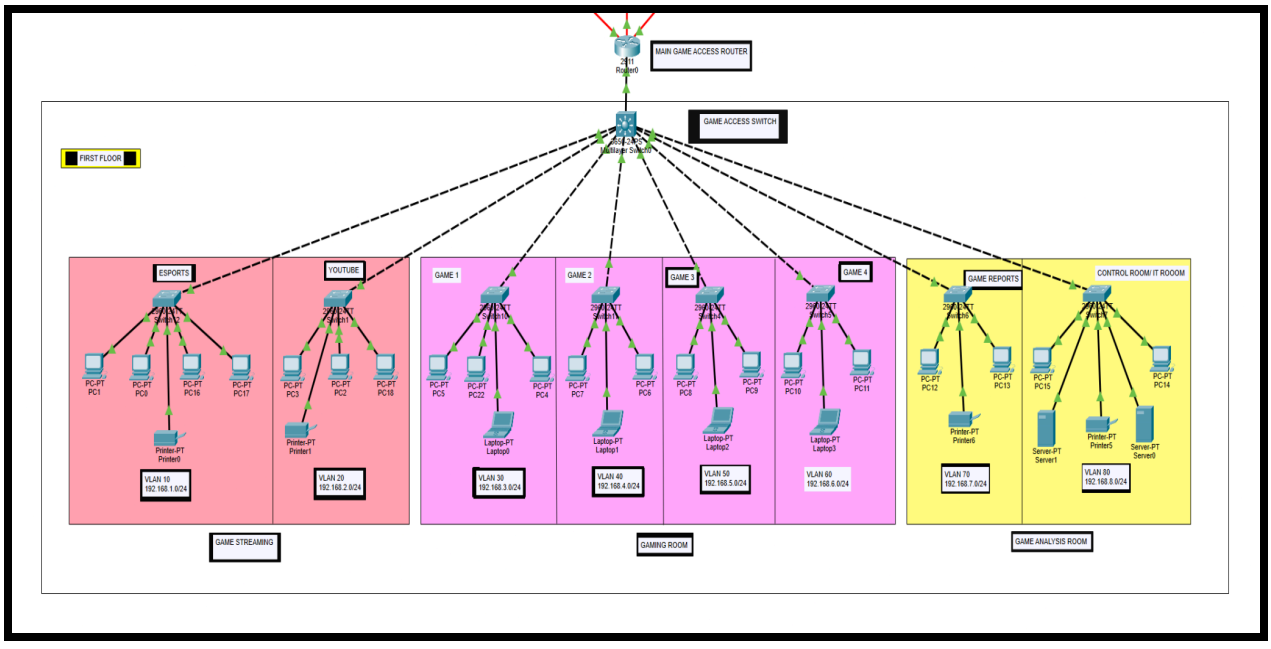
- **Free Game Access Room**

VLAN 100

192.168.10.0/24



First Floor



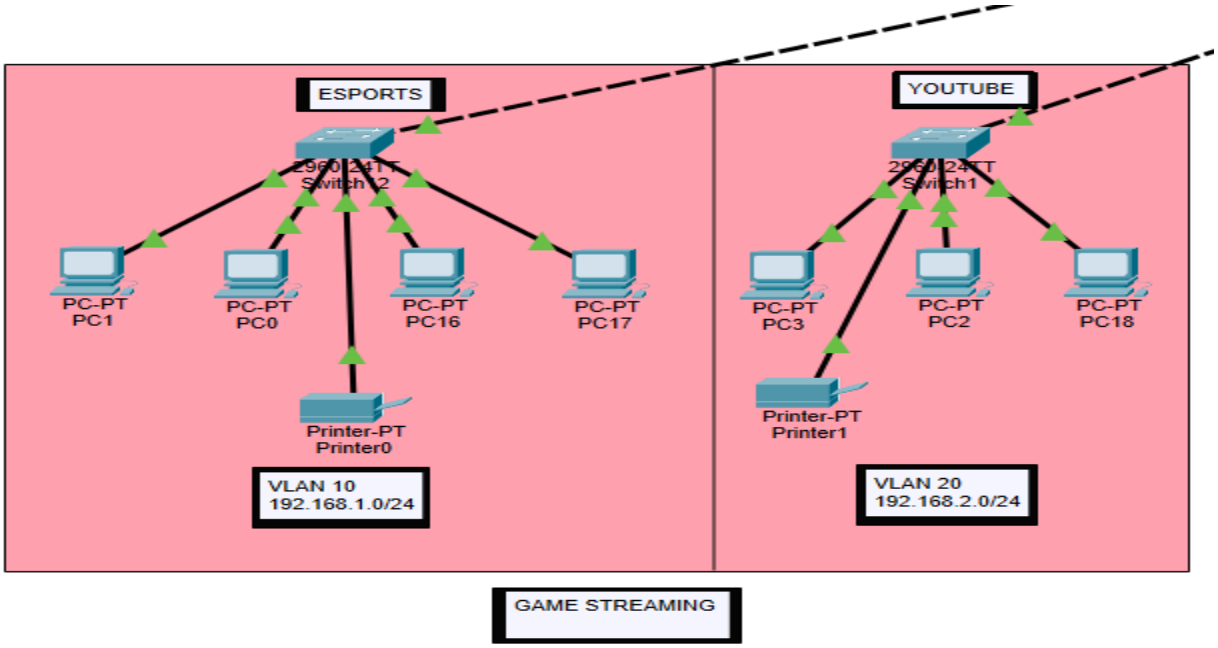
- **Game Streaming Department**

VLAN 10 (for esports)

192.168.1.0/24

VLAN 20(for youtube)

192.168.2.0/24



- **3 Gaming Department**

VLAN 30(for game1)

192.168.3.0/24

VLAN 40(for game2)

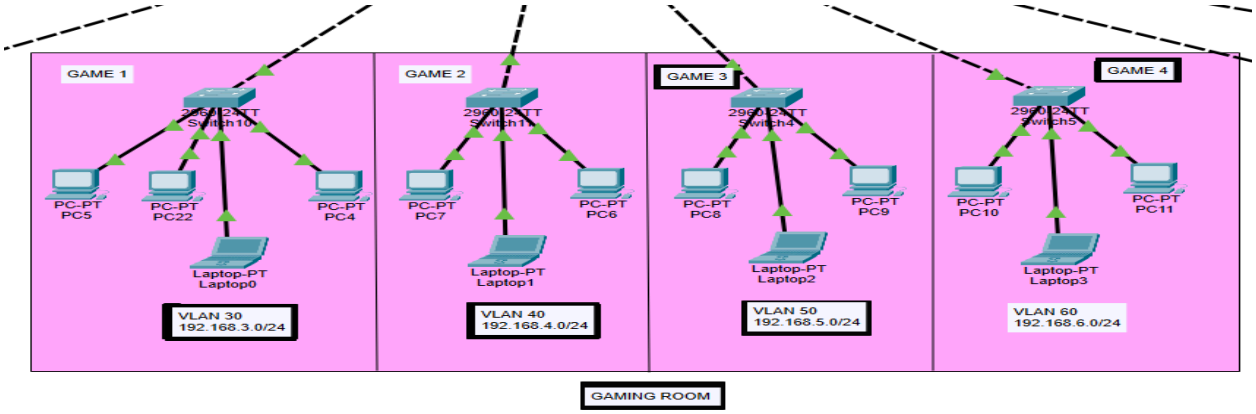
192.168.4.0/24

VLAN 50(for game3)

192.168.5.0/24

VLAN 60(for game4)

192.168.6.0/24



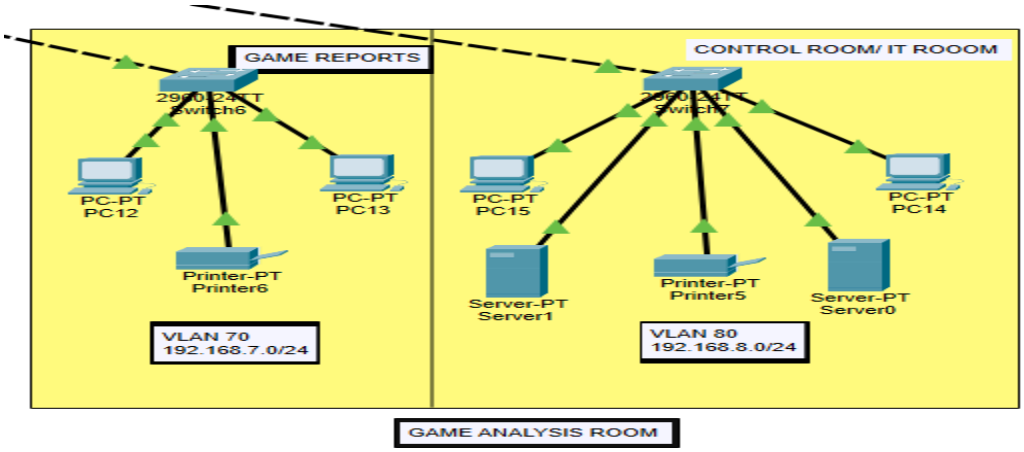
- **Report Department and Control Room**

VLAN 70(for game reports)

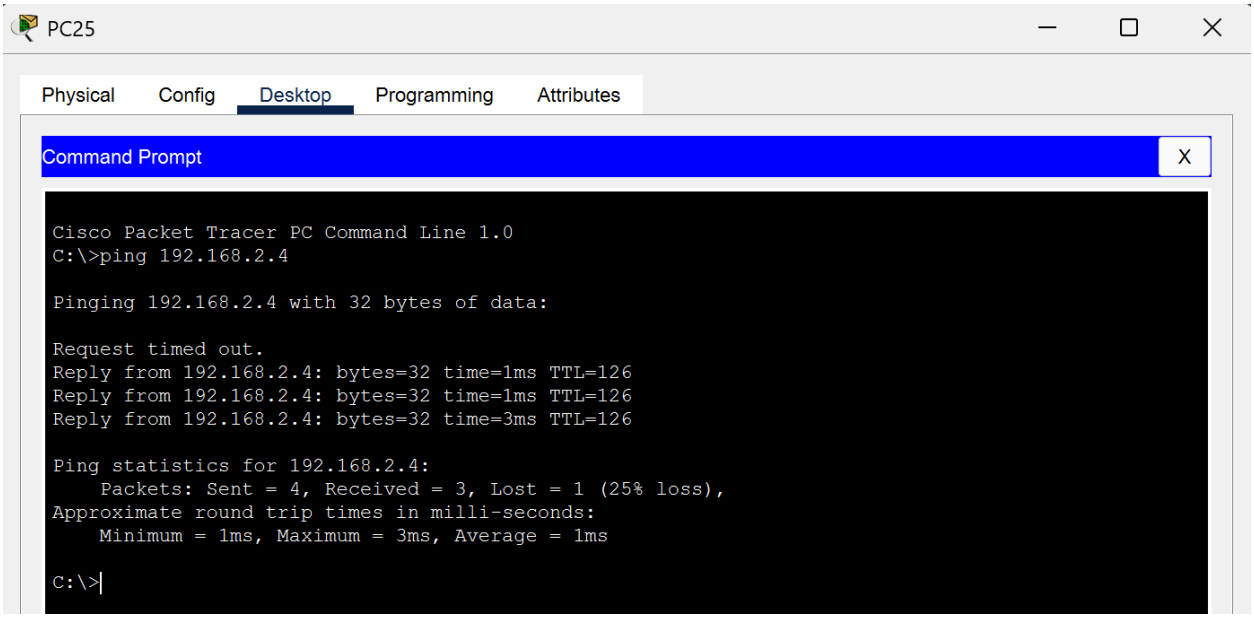
192.168.7.0/24

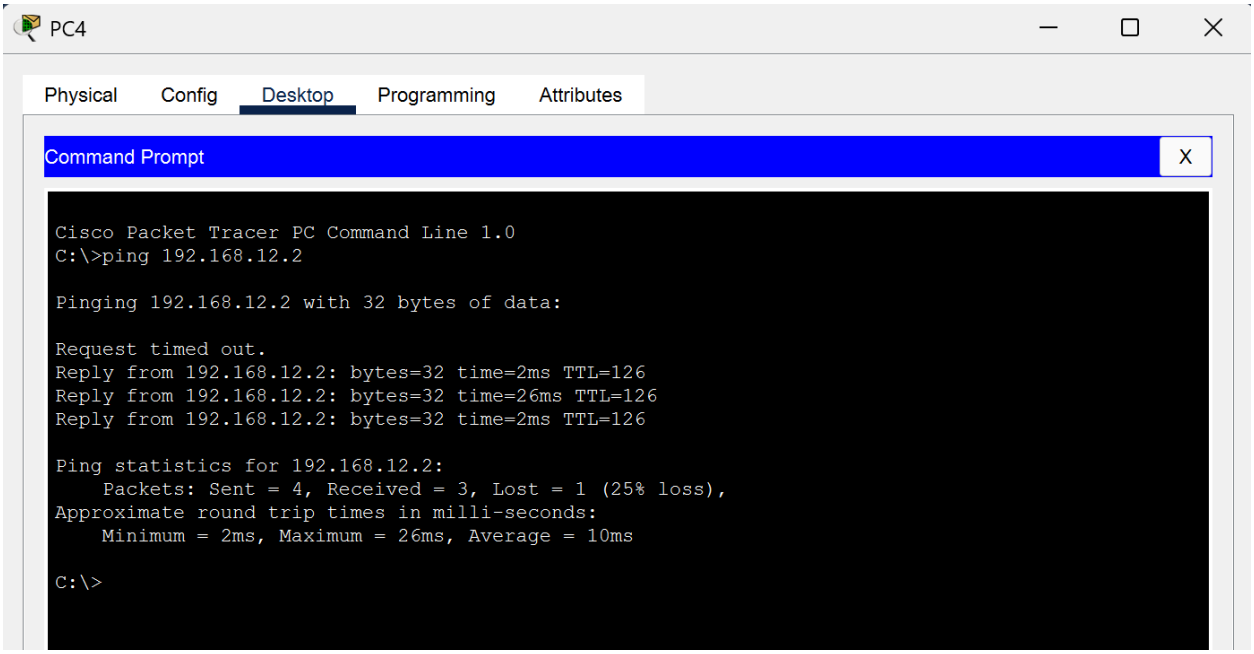
VLAN 80(for control room)

192.168.8.0/24

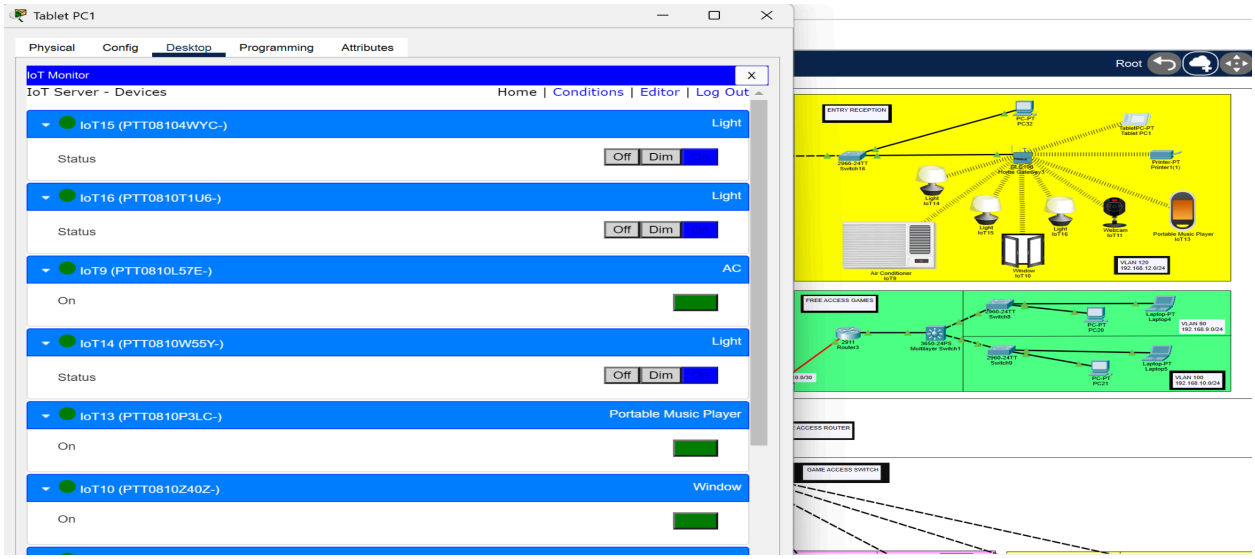


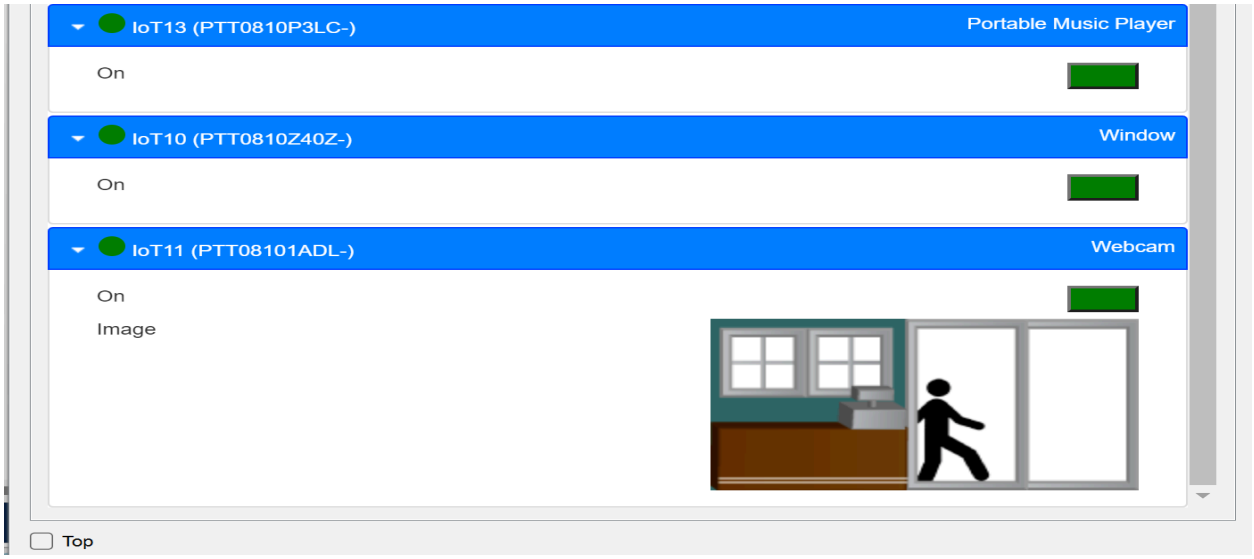
PINGING A DEVICE TO CHECK TRANSFER OF MESSAGE FROM ONE DEPARTMENT TO ANOTHER THROUGH ROUTERS AND SWITCHES



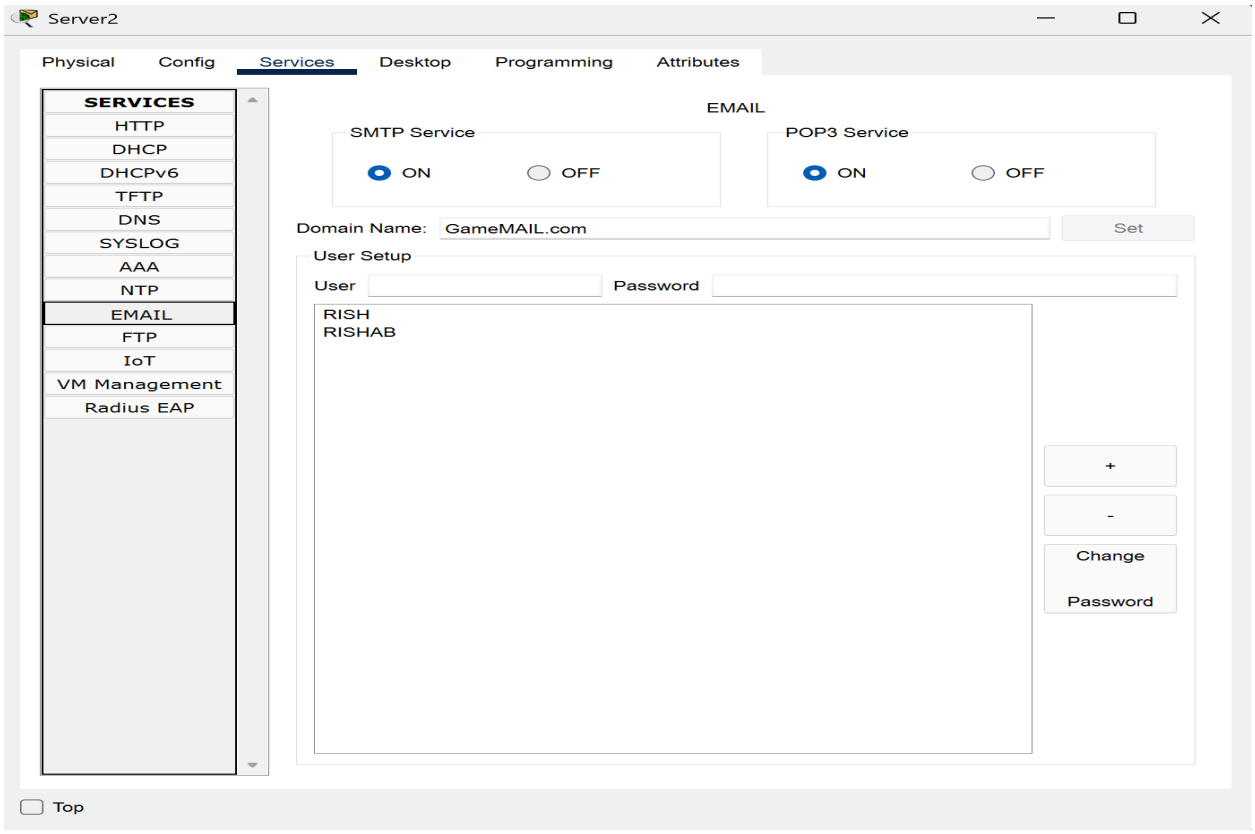


WORKING OF IoT





EMAIL SERVER IN CLOUD



p.t.o

CLI CONFIG

1. to change state of routers connection from down to up

```
en

conf t

int gig0/0

no sh

do wr

ex
```

2. add ac power supply to each multilayer switches

3. to add clock rate for connections

```
in se0/1/0

clock rate 64000
```

4. assigning vlan for each switch

```
en

conf t

int range fa0/1-24

switchport mode access

switchport access vlan 10

do wr
```

```
ex
```

5. connecting multilayer switch to switch by letting multilayer switch recognise the vlan assigned to switch

```
en

conf t

int gig1/0/2

switchport mode access

switchport access vlan 10

ex

#after assigning at last use

do wr
```

6. trunk from multilayer switch to router

```
en

conf t

int gig1/0/1

switchport trunk encapsulation dot1q(doesn't work in 2023
version)

switchport mode trunk

ex

do wr
```

7. router-router connection(ip address for ports) router-server also works

```
en

conf t

int se0/1/0

ip address 10.10.10.1 255.255.255.252

ex
```

8. for the router know info about vlan connected

```
int gig0/0.90

encapsulation dot1Q 90

ip address 192.168.9.1 255.255.255.0

ex

do wr


service dhcp

ip dhcp pool staf-pool

network 192.168.9.0 255.255.255.0

default-router 192.168.9.1

dns-server 192.168.9.1

ex

do wr
```

9. router protocal

```
en

conf t

router rip

version 2

network 192.168.9.0

network 192.168.10.0

network 10.10.10.0

ex

do wr
```