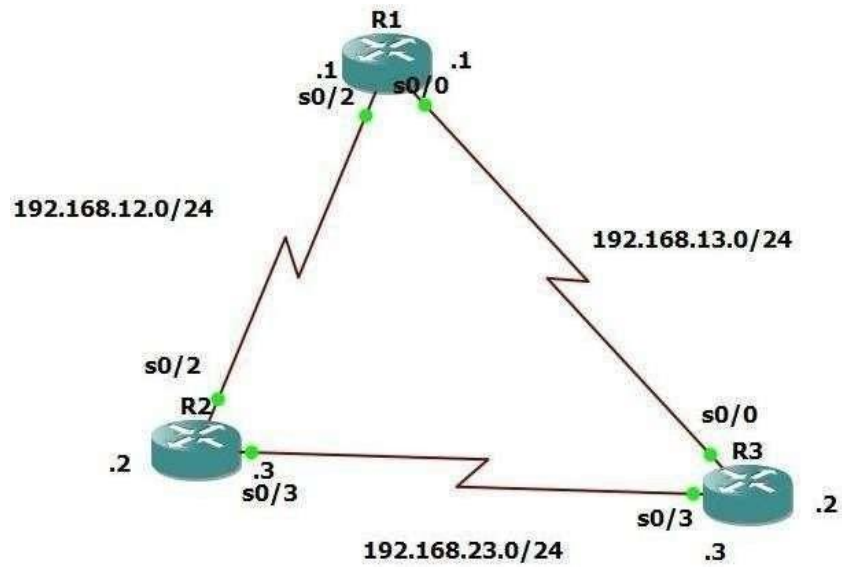


Practical No : 8 A

Aim: Configuring MPLS (On GNS3).



Configure router R1:-

```
R1#conf t R1(config)#int se1/0
R1(config-if)#ip add 192.168.13.1 255.255.255.0
R1(config-if)#no shut
R1(config-if)#exit
R1(config)#int se1/2
R1(config-if)#ip add 192.168.12.1 255.255.255.0
R1(config-if)#no shut
R1(config-if)#exit
```

Configure router R2

```
R2#conf t
R2(config)#int se1/2
R2(config-if)#ip add 192.168.12.2 255.255.255.0
R2(config-if)#no shut
R2(config-if)#exit
R2(config)#int se1/3
R2(config-if)#ip add 192.168.23.1 255.255.255.0
R2(config-if)#no shut
R2(config-if)#exit
```

Configure Router R3

```
R3#conf t
R3(config)#int se1/0
R3(config-if)#ip add 192.168.13.2 255.255.255.0
R3(config-if)#no shut
R3(config-if)#exit
R3(config)#int se1/3
R3(config-if)#ip add 192.168.23.2 255.255.255.0
R3(config-if)#no shut
R3(config-if)#exit
```

Configure OSPF on R1

```
R1#conf t
R1(config)#router ospf 1
R1(config-router)#network 192.168.12.0 255.255.255.0 area 0
R1(config-router)#network 192.168.13.0 255.255.255.0 area 0
R1(config-router)#end
```

Configure OSPF on R2

```
R2#conf t
R2(config)#router ospf 1
R2(config-router)#network 192.168.12.0 255.255.255.0 area 0
R2(config-router)#network 192.168.23.0 255.255.255.0 area 0
R2(config-router)#end
```

Configure OSPF on R3

```
R3#conf t
R3(config)#router ospf 1
R3(config-router)#network 192.168.13.0 255.255.255.0 area 0
R3(config-router)#network 192.168.13.0 255.255.255.0 area 0
R3(config-router)#network 192.168.23.0 255.255.255.0 area 0
R3(config-router)#end
```

Enable MPLS on R1

```
R1#conf t
R1(config)#int se1/0
R1(config-if)#mpls ip
R1(config-if)#int se1/2
R1(config-if)#mpls ip
```

Enable MPLS on R2

```
R2#conf t
R2(config)#int se1/2
R2(config-if)#mpls ip
R2(config-if)#int se1/3
R2(config-if)#mpls ip
```

Enable MPLS on R3

```
R3#conf t
R3(config)#int se1/0
R3(config-if)#mpls ip
R3(config-if)#int se1/3
R3(config-if)#mpls ip
```

Check MPLS interface

```
R1#sh mpls int
Interface      IP          Tunnel      Operational
Serial1/0      Yes (ldp)   No          Yes
Serial1/2      Yes (ldp)   No          Yes
R1#
```

Check MPLS interface

```
R2#sh mpls int
Interface      IP      Tunnel  Operational
Serial1/2      Yes (ldp) No       Yes
Serial1/3      Yes (ldp) No       Yes
R2#
```

Check MPLS interface