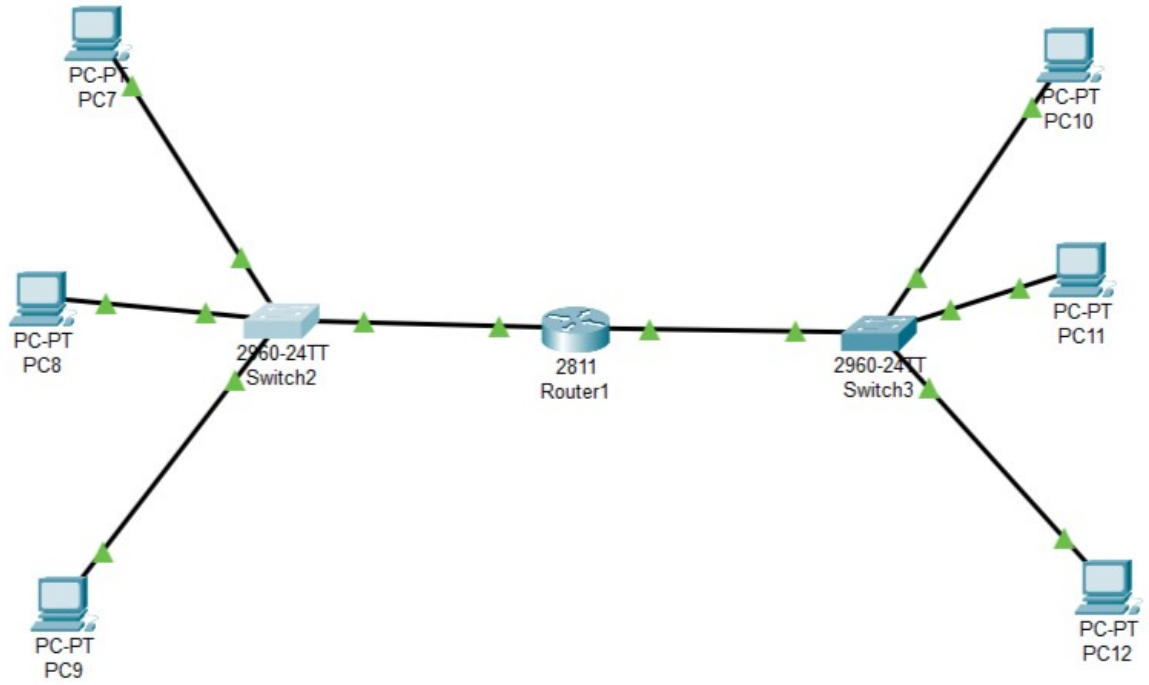
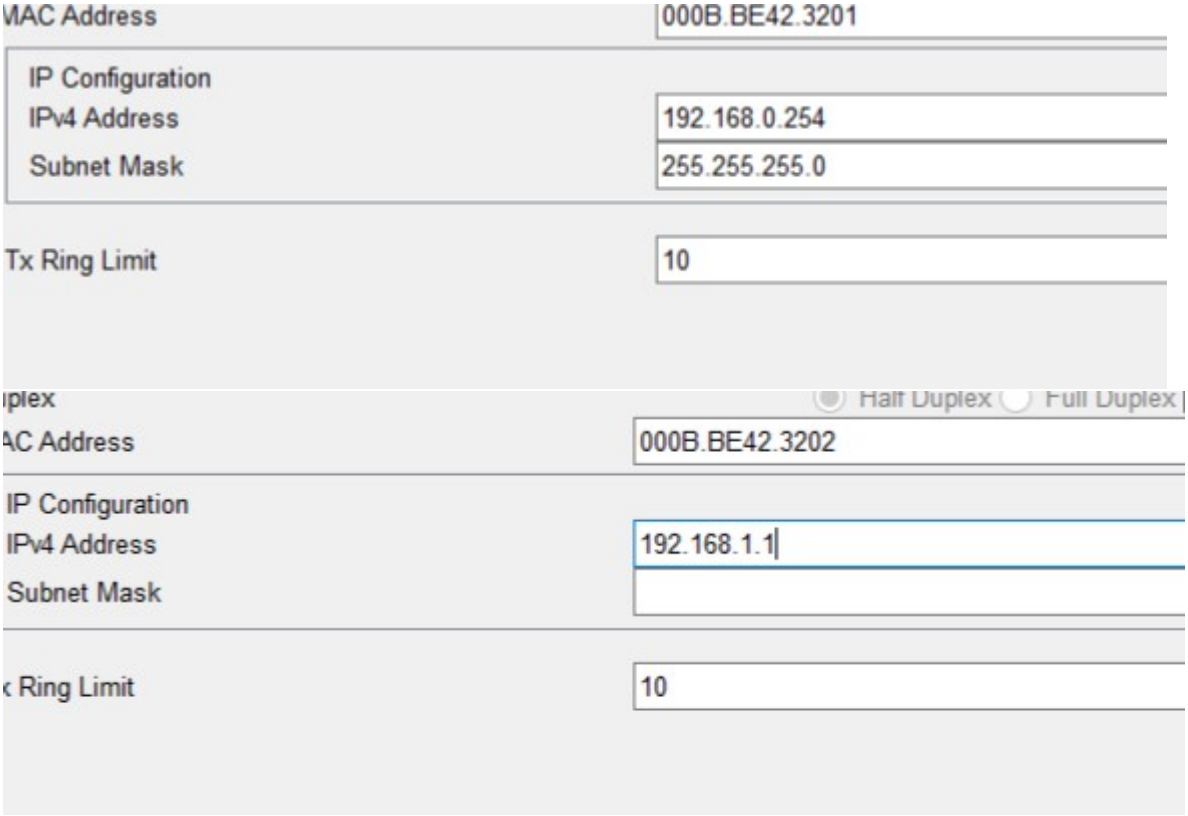
Лабораторная 12





```
Router#ping 192.168.0.0

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.0.0, timeout is 2 seconds:

Reply to request 0 from 192.168.0.1, 0 ms
Reply to request 0 from 192.168.0.3, 0 ms
Reply to request 0 from 192.168.0.2, 1 ms
Reply to request 1 from 192.168.0.1, 0 ms
Reply to request 1 from 192.168.0.2, 0 ms
Reply to request 1 from 192.168.0.3, 1 ms
Reply to request 2 from 192.168.0.1, 0 ms
Reply to request 2 from 192.168.0.2, 0 ms
Reply to request 2 from 192.168.0.3, 0 ms
Reply to request 3 from 192.168.0.1, 0 ms
Reply to request 3 from 192.168.0.2, 0 ms
Reply to request 3 from 192.168.0.3, 0 ms
Reply to request 4 from 192.168.0.1, 0 ms
Reply to request 4 from 192.168.0.2, 0 ms
Reply to request 4 from 192.168.0.3, 0 ms

Router#
```



```
Router#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       D - EIGRP, EX - EIGRP external, O - OSPF, IA - OSPF inter area
       N1 - OSPF NSSA external type 1, N2 - OSPF NSSA external type 2
       E1 - OSPF external type 1, E2 - OSPF external type 2, E - EGP
       i - IS-IS, L1 - IS-IS level-1, L2 - IS-IS level-2, ia - IS-IS inter area
       * - candidate default, U - per-user static route, o - ODR
       P - periodic downloaded static route

Gateway of last resort is not set

     192.168.0.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.0.0/24 is directly connected, FastEthernet0/0
L       192.168.0.254/32 is directly connected, FastEthernet0/0
     192.168.1.0/24 is variably subnetted, 2 subnets, 2 masks
C       192.168.1.0/24 is directly connected, FastEthernet0/1
L       192.168.1.1/32 is directly connected, FastEthernet0/1

Router#
```


Эта команда является важным инструментом для диагностики проблем с маршрутизацией, поскольку она позволяет увидеть, как маршрутизатор понимает сеть и куда он будет отправлять трафик. С помощью этой команды можно выявить неправильные маршруты, отсутствие маршрутов и другие проблемы, которые могут привести к недоступности ресурсов в сети.

В данном конкретном выводе:

- Маршрутизатор знает о двух сетях: 192.168.0.0/24 и 192.168.1.0/24.
- Он напрямую подключен к этим сетям через интерфейсы FastEthernet0/0 и FastEthernet0/1.
- Видны локальные (L) адреса интерфейсов.

```
Router#ping 192.168.0.254

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.0.254, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 5/7/15 ms

Router#ping 192.168.1.1

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 192.168.1.1, timeout is 2 seconds:
!!!!!
Success rate is 100 percent (5/5), round-trip min/avg/max = 4/5/8 ms

Router#
```