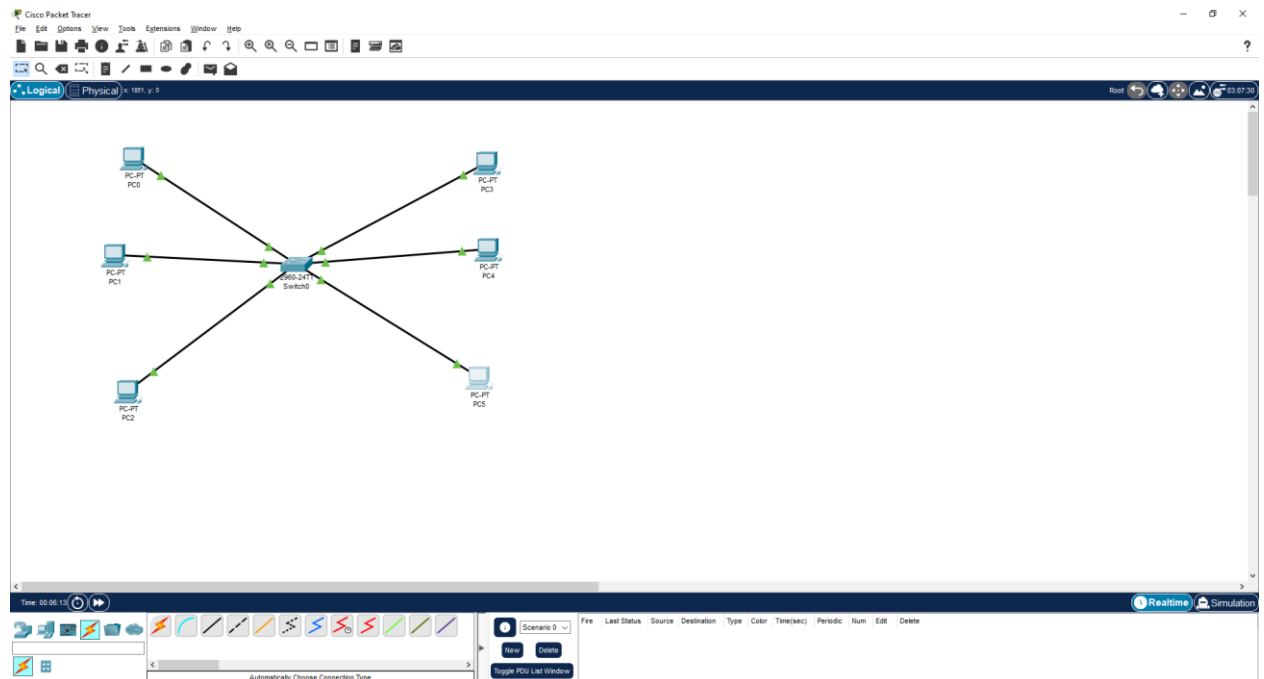
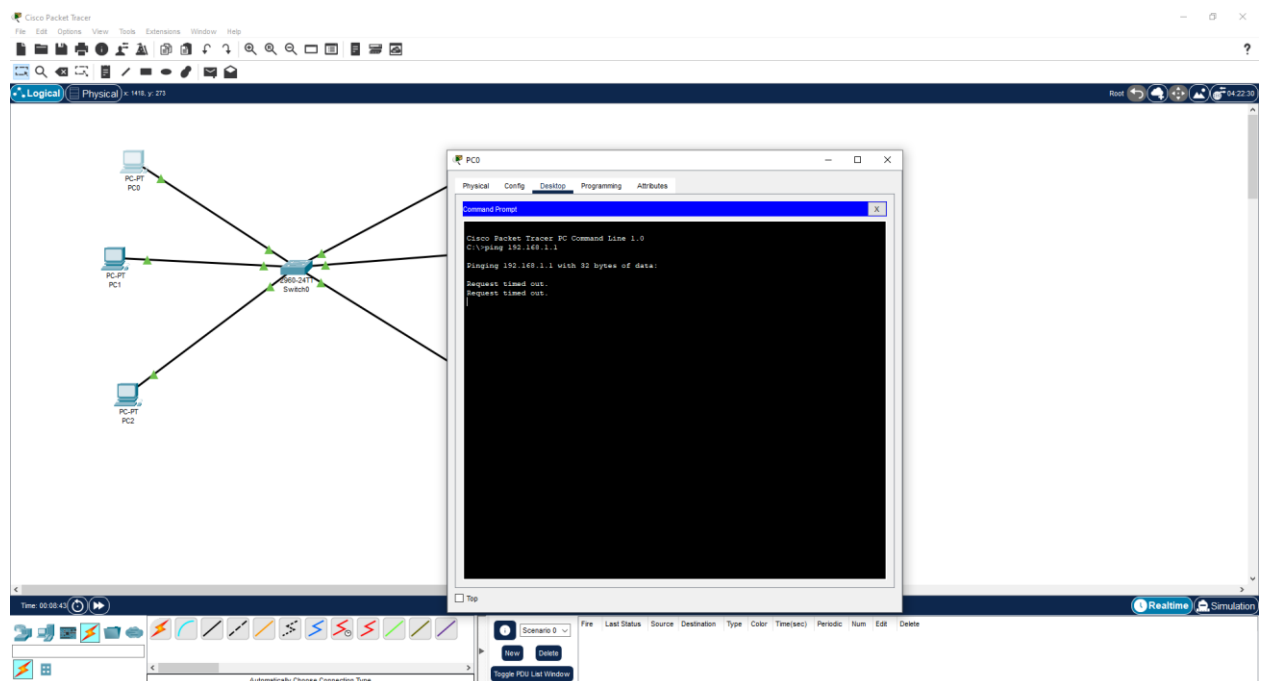


## Практическая №13

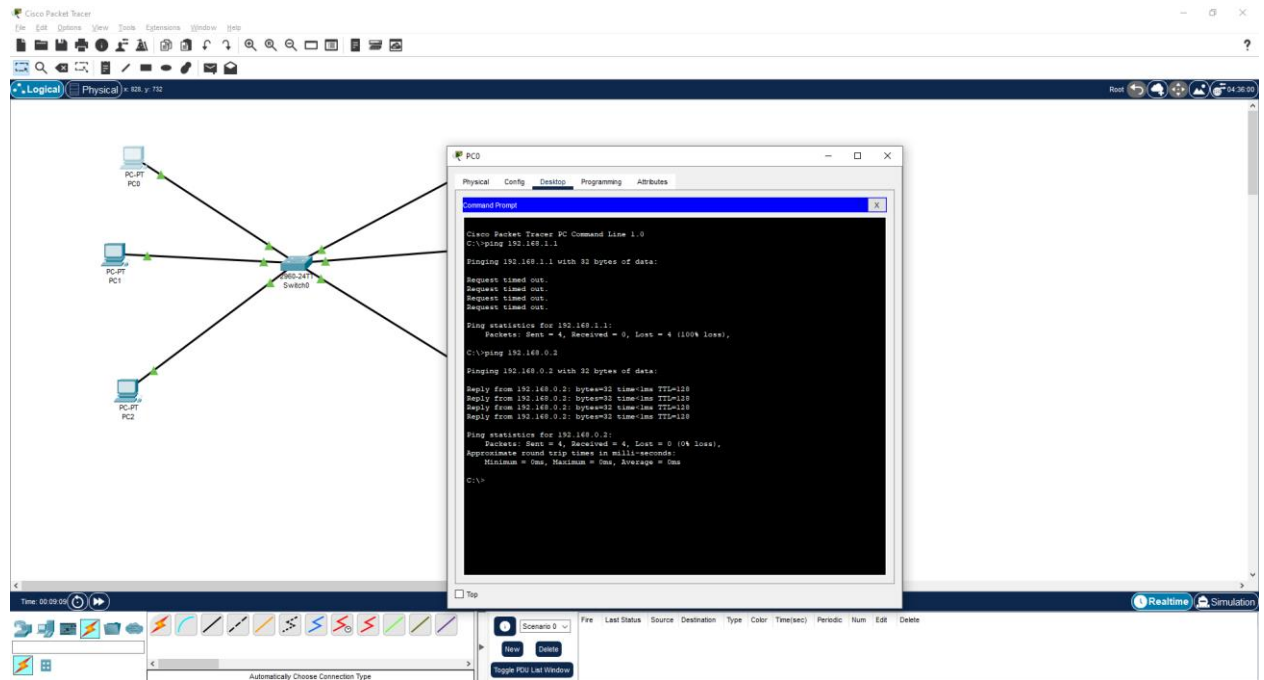
1.



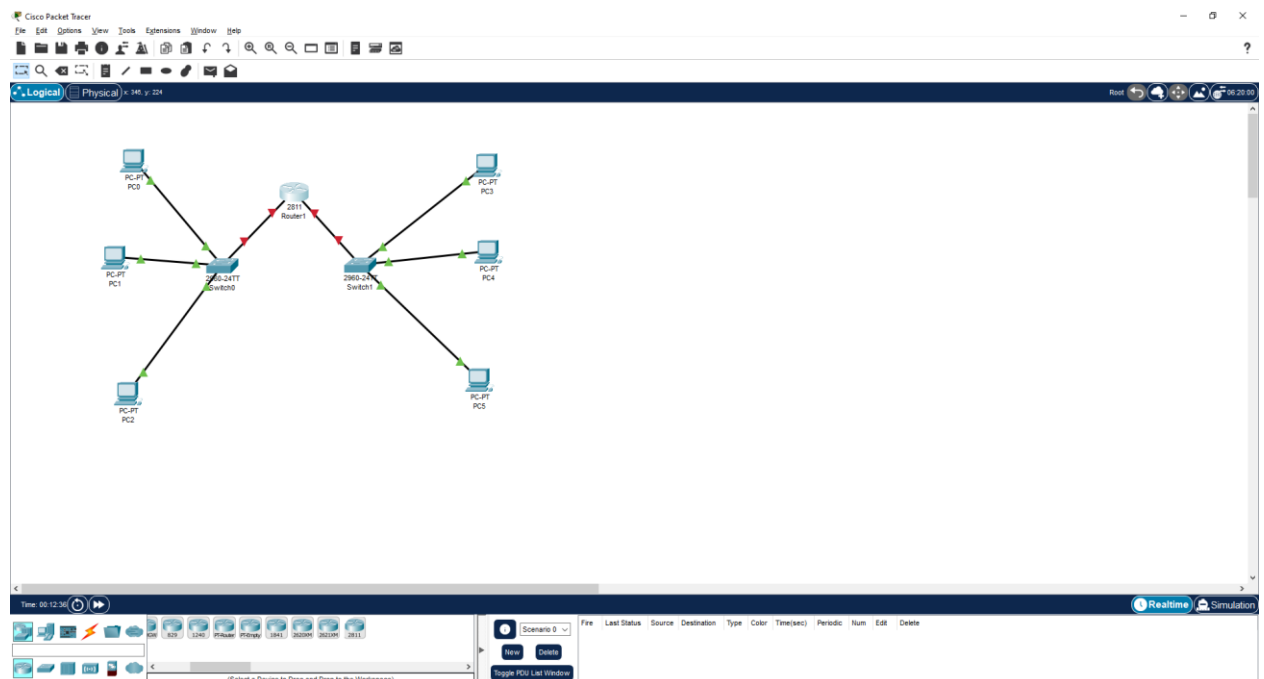
2.



3.



4.



5.

The screenshot shows the Cisco Packet Tracer interface. On the left, a network topology is visible with three PCs (PC-PT1, PC-PT2, PC-PT3) connected to a central switch (2960-24TT Switch0), which is connected to a router (2911 Router1). The router is also connected to another switch (2960-24TT Switch1). The right pane shows the configuration window for Router1, specifically the 'FastEthernet0/1' interface. The configuration includes the following commands:

```

Router1(config)#interface FastEthernet0/1
Router1(config-if)#ip address 192.168.0.254 255.255.255.0
Router1(config-if)#no shutdown
Router1(config-if)#exit
Router1(config)#interface FastEthernet0/0
Router1(config-if)#ip address 192.168.1.1 255.255.255.0
Router1(config-if)#no shutdown
Router1(config-if)#exit
Router1(config)#interface FastEthernet0/1
Router1(config-if)#ip address 192.168.0.254 255.255.255.0
Router1(config-if)#no shutdown
Router1(config-if)#exit

```

The interface configuration window also shows the 'FastEthernet0/1' interface details, including the IP address 192.168.0.254 and the subnet mask 255.255.255.0.

6.

The screenshot shows the same Cisco Packet Tracer interface as in step 5. The right pane now shows the 'IOS Command Line Interface' window for Router1. The output of the configuration commands is displayed, showing that the interfaces are up and the IP addresses are configured. The output includes the following text:

```

Router1(config)#interface FastEthernet0/1
%LINE5-CHANGED: Interface FastEthernet0/1, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up
Router1(config-if)#exit
Router1(config)#interface FastEthernet0/0
Router1(config-if)#no shutdown
Router1(config-if)#exit
%LINE5-CHANGED: Interface FastEthernet0/0, changed state to up
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up
Router1(config-if)#ping 192.168.0.0
^ Invalid input detected at '^' marker.
Router1(config-if)#ping 192.168.0.0
^ Invalid input detected at '^' marker.
Router1(config)#ping 192.168.0.0
Type escape sequence to abort.
Sending 5, 100-byte ICMP Echoes to 192.168.0.0, timeout is 2 seconds:
Reply to request 0 from 192.168.0.0: 0 ms
Reply to request 1 from 192.168.0.0: 0 ms
Reply to request 2 from 192.168.0.0: 0 ms
Reply to request 3 from 192.168.0.0: 0 ms
Reply to request 4 from 192.168.0.0: 0 ms

```

The output shows that the interfaces are up and the IP addresses are configured. The ping command is also shown, indicating that the network is operational.

7.

The screenshot shows the Cisco Packet Tracer interface. The network topology includes three PCs (PC-PT1, PC-PT2, PC-PT3) connected to a central switch (2950-24TT), which is connected to a router (2911). The router is also connected to another switch (2960-24T). The CLI window for Router1 is open, displaying the output of the 'show ip route' command. The output shows the routing table for Router1, including the default route (0.0.0.0/0) and the routes to the destination network (192.168.0.0/24).

```

Router1#show ip route
Codes: L - local, C - connected, S - static, R - RIP, M - mobile, B - BGP
       O - OSPF, EX - OSPF 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, S - BGP
       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
C       192.168.0.128/25 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
Router1#
  
```

8.

The screenshot shows the Cisco Packet Tracer interface. The network topology is the same as in the previous screenshot. The Command Prompt window for PC1 is open, displaying the output of the 'ping' command. The output shows the results of pinging 192.168.1.1, 192.168.0.2, and 192.168.1.2. The results show that the ping to 192.168.1.1 failed (Request timed out), while the pings to 192.168.0.2 and 192.168.1.2 were successful.

```

C:\>ping 192.168.1.1 with 32 bytes of data:
Request timed out.
Request timed out.
Request timed out.
Request timed out.
Ping statistics for 192.168.1.1:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),
C:\>ping 192.168.0.2
Pinging 192.168.0.2 with 32 bytes of data:
Reply from 192.168.0.2: bytes=32 time=1ms TTL=128
Reply from 192.168.0.2: bytes=32 time=1ms TTL=128
Reply from 192.168.0.2: bytes=32 time=1ms TTL=128
Reply from 192.168.0.2: bytes=32 time=1ms TTL=128
Ping statistics for 192.168.0.2:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>ping 192.168.1.2
Pinging 192.168.1.2 with 32 bytes of data:
Request timed out.
Reply from 192.168.1.2: bytes=32 time=1ms TTL=127
Reply from 192.168.1.2: bytes=32 time=1ms TTL=127
Reply from 192.168.1.2: bytes=32 time=1ms TTL=127
Ping statistics for 192.168.1.2:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 0ms, Maximum = 0ms, Average = 0ms
C:\>
  
```