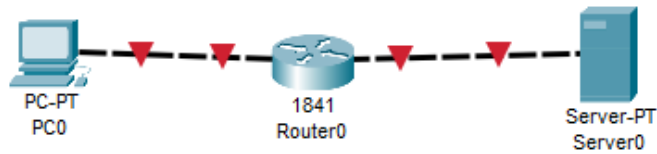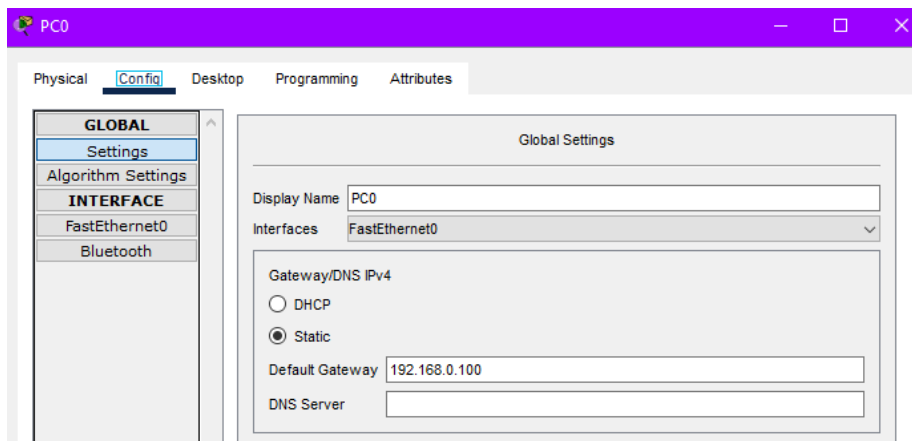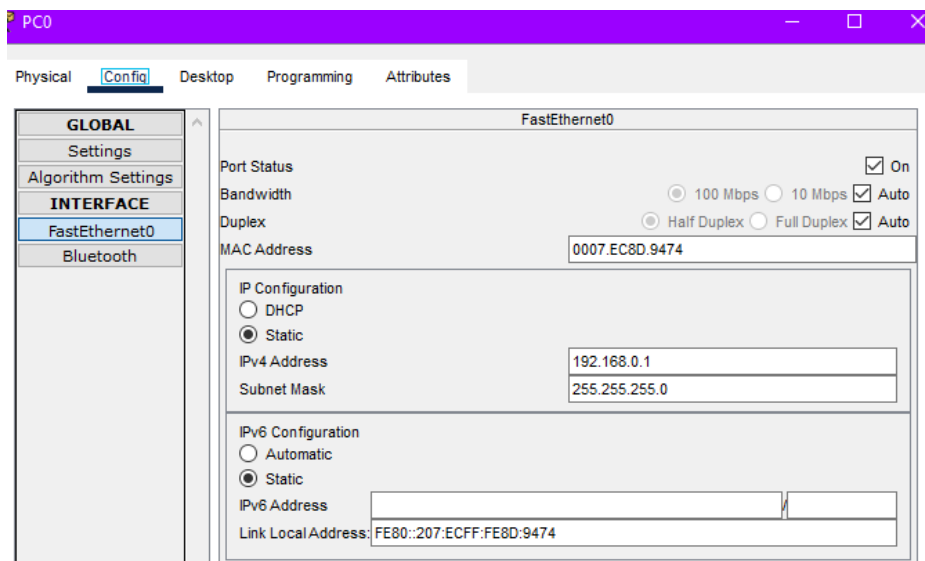*Выполнила: Федотова Дарина*

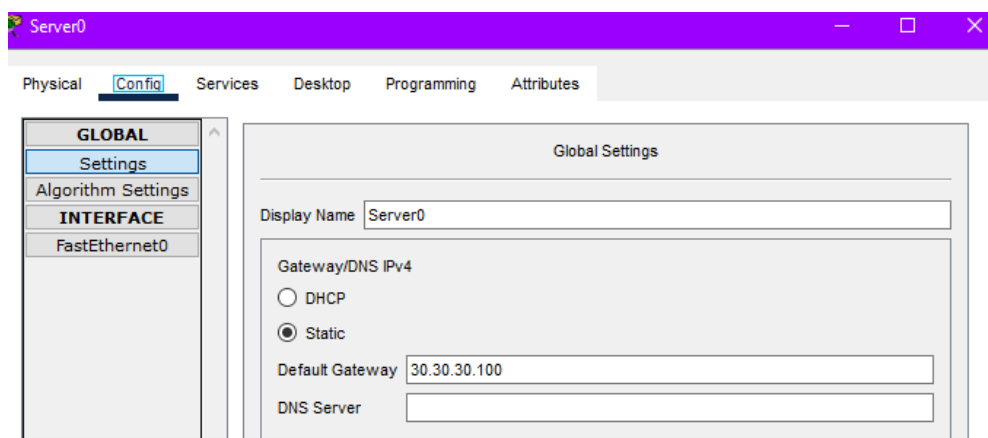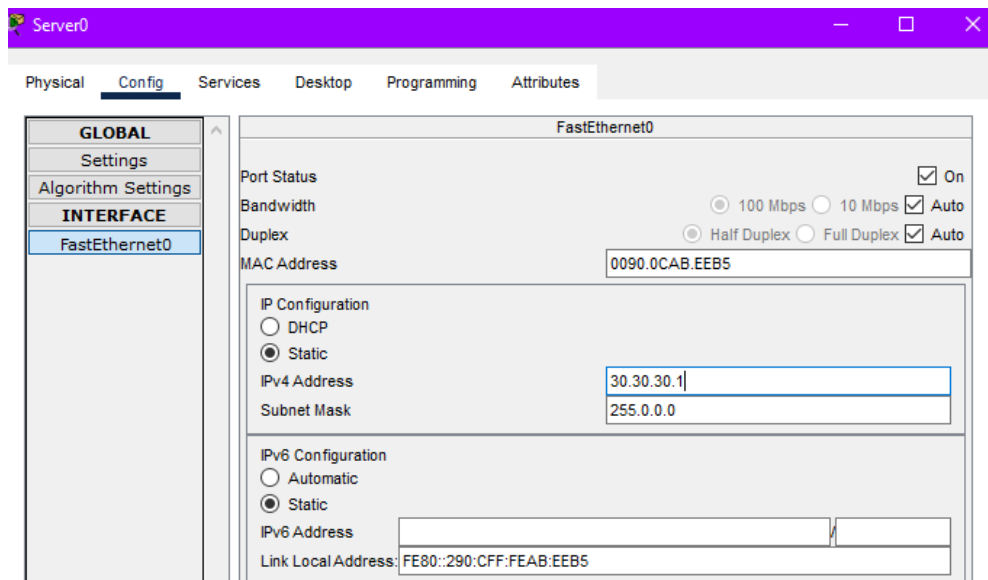**Практическая работа 21 – Технология NAT**
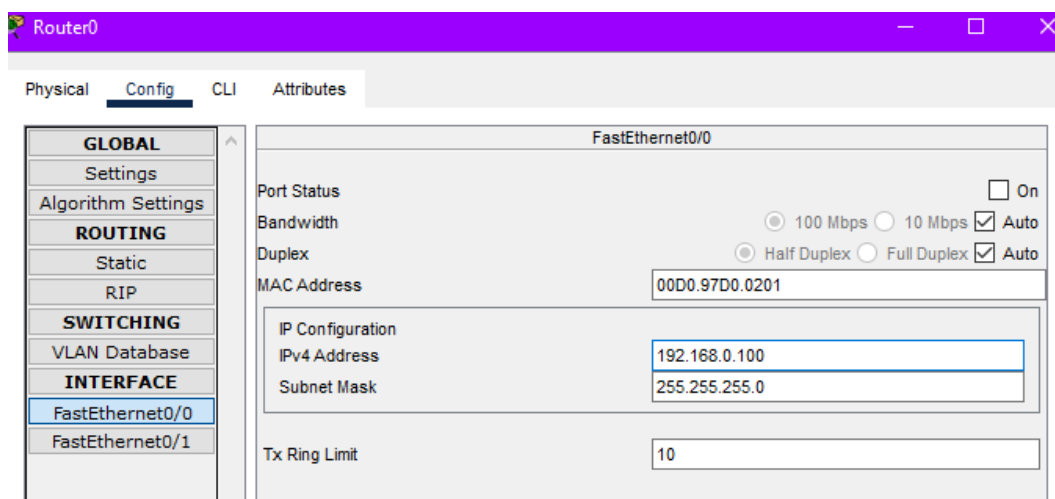
1. Строю сеть

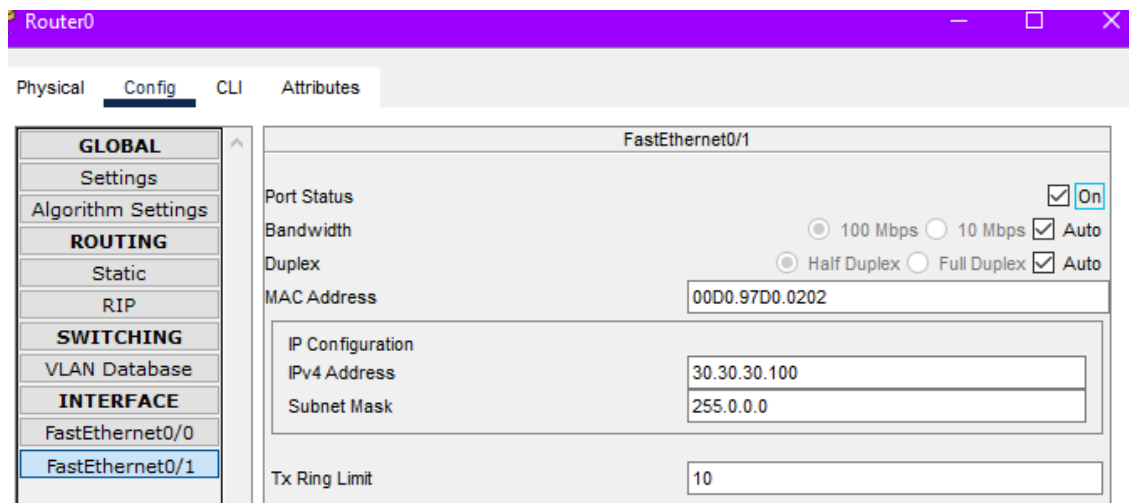
2. Настраиваю айпи адрес и шлюз для ПК

3. Аналогично для сервера

4. В роутере настраиваю порты

5. Далее переходим в терминал роутера и прописываем код

```
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/0, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/0, changed state to up

Router(config-if)#exit
Router(config)#interface FastEthernet0/1
Router(config-if)#ip address 30.30.30.100 255.0.0.0
Router(config-if)#ip address 30.30.30.100 255.0.0.0
Router(config-if)#no shutdown
Router(config-if)#
%LINK-5-CHANGED: Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Router(config-if)#
Router(config-if)#
Router(config-if)#
Router(config-if)#ex
Router(config)#access-list 1 permit any
Router(config)#ip nat inside source list 1 iinterface fa0/1 overload
                                          ^
% Invalid input detected at '^' marker.

Router(config)#ip nat inside source list 1 interface fa0/1 overload
Router(config)#int fa0/0
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#int fa0/1
Router(config-if)#ip net outside
                       ^
% Invalid input detected at '^' marker.

Router(config-if)#ip nat outside
Router(config-if)#ex
Router(config)#
```

6. Пингуем


```
Cisco Packet Tracer PC Command Line 1.0
C:\>ping 30.30.30.1

Pinging 30.30.30.1 with 32 bytes of data:

Request timed out.
Reply from 30.30.30.1: bytes=32 time<1ms TTL=127
Reply from 30.30.30.1: bytes=32 time<1ms TTL=127
Reply from 30.30.30.1: bytes=32 time<1ms TTL=127

Ping statistics for 30.30.30.1:
    Packets: Sent = 4, Received = 3, Lost = 1 (25% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>
```

7. Проверяем команду Show ip nat translations в терминале роутера


```
                          IOS Command Line Interface
Router(config)#ip nat inside s
Router(config)#ip nat inside source 1 in
Router(config)#ip nat inside source 1 int
Router(config)#ip nat inside source list 1 in
Router(config)#ip nat inside source list 1 interface fa0/1 ov
Router(config)#ip nat inside source list 1 interface fa0/1 overload
Router(config)#int fa0/0
Router(config-if)#ip nat in
Router(config-if)#ip nat inside
Router(config-if)#exit
Router(config)#int fa0/1
Router(config-if)#ip nat ou
Router(config-if)#ip nat outside
Router(config-if)#exit
Router(config)#exit
Router#
%SYS-5-CONFIG_I: Configured from console by console

Router#wr mem
Building configuration...
[OK]
Router#show ip nat co
Router#show ip nat cond
Router#show ip nat conf
Router#show ip nat tr
Router#show ip nat translations
Router#
%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to down

%LINEPROTO-5-UPDOWN: Line protocol on Interface FastEthernet0/1, changed state to up

Router#show ip nat translations
Router#
```