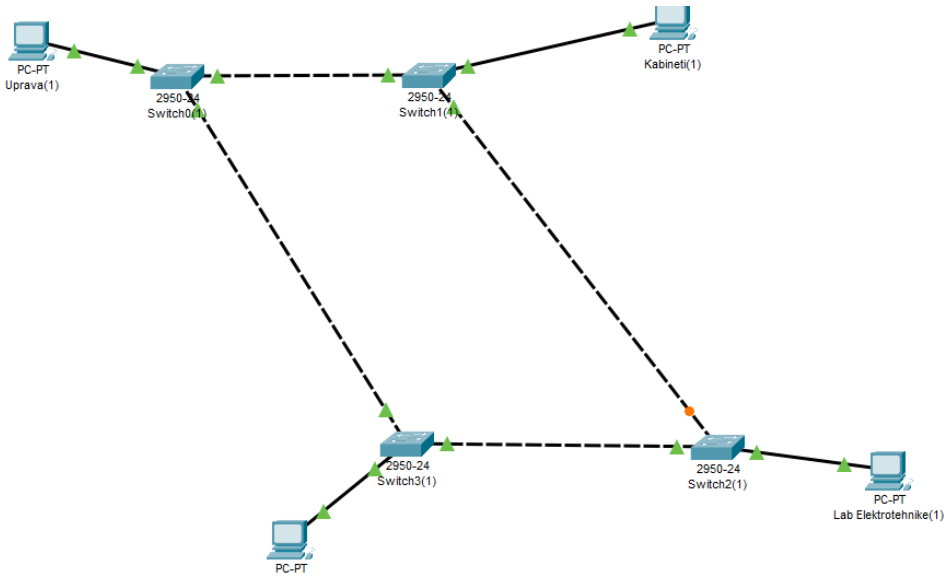
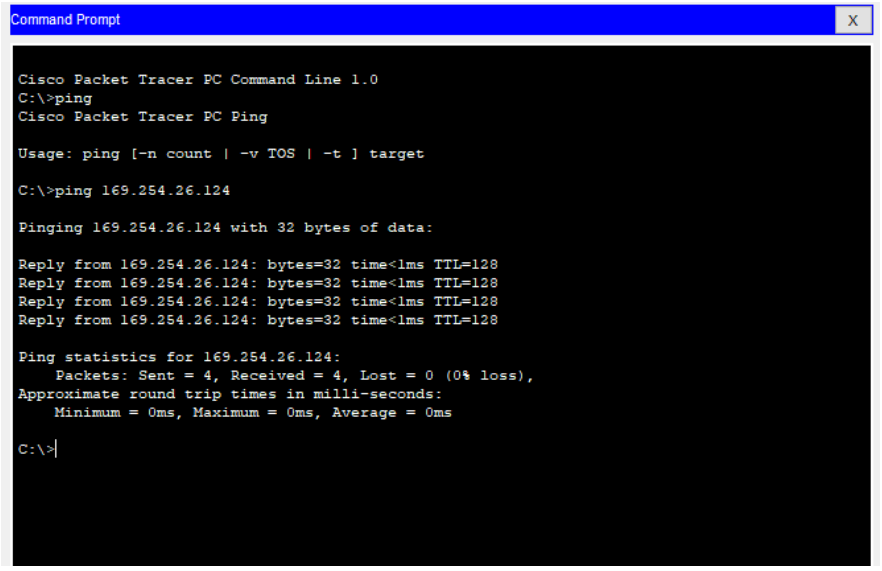
LV03 subnetiranje VLSM

Prvi zadatak





Drugi zadatak

subnet	hostova	Dostupnih adresa	Adresa mreze	Maska	Opseg adresa	Broadcast
Laboratorij računarstva	37	62	192.168.100.0/26	255.255.255.192	192.168.100.1 - 192.168.100.62	192.168.100.63
Laboratorij elektrotehnike	17	30	192.168.100.64/27	255.255.255.224	192.168.100.65 - 192.168.100.94	192.168.100.95
Kabineti	9	14	192.168.100.96/28	255.255.255.240	192.168.100.97 - 192.168.100.110	192.168.100.111
Uprava	5	6	192.168.100.112/29	255.255.255.248	192.168.100.113 - 192.168.100.118	192.168.100.119

Kakao bi izracunali porrebne parametre, koristimo se bitovima u subnet maski. Za odreden broj hostova se koriste drugacije kombinacije bitova bazom 2. Tako racunamo potrebnih bitova za kombinaciju eksponenta.

Npr.

Za potrebnih 37 hostova je potrebna kombinacija bitova. 2^5 ima premal broj hostova (32-2=30), a 2^6 je taman i vise (64-2=62). Stoga, koristimo 6 bitova kombinacija. Kako je tih 6 bitova oduzeto (od mogucih 32) za mrezni dio ostaje oznaka /26. Maska se racuna stavljanjem jedinice u svih 26 bitova u mreznom djelu adrese. Kako je zadnja adresa u subnetu .63 (broadcast), sljedeci subnet zapocinje istim postupkom, ali na broj 64.

Elektrotehnika – 2^5-2 = 30 → dovoljno za 17 hostova

Kabineti – 2^4-2=14 → dovoljno za 9 racunala

Uprava – 2^3-2=6 → dovoljno za 5 hostova

```
                                0.0.0.0

Bluetooth Connection:

   Connection-specific DNS Suffix..:
   Link-local IPv6 Address.....: ::
   IPv6 Address.....: ::
   IPv4 Address.....: 0.0.0.0
   Subnet Mask.....: 0.0.0.0
   Default Gateway.....: ::
                                0.0.0.0

C:\>ping 192.168.100.1

Pinging 192.168.100.1 with 32 bytes of data:

Reply from 192.168.100.1: bytes=32 time<1ms TTL=128
Reply from 192.168.100.1: bytes=32 time<1ms TTL=128
Reply from 192.168.100.1: bytes=32 time<1ms TTL=128
Reply from 192.168.100.1: bytes=32 time<1ms TTL=128

Ping statistics for 192.168.100.1:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
    Minimum = 0ms, Maximum = 0ms, Average = 0ms

C:\>ping 192.168.100.118

Pinging 192.168.100.118 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.

Ping statistics for 192.168.100.118:
    Packets: Sent = 4, Received = 0, Lost = 4 (100% loss),

C:\>Z
```