**HOMEWORK VLSM TASK – 2021**

**Владислав Колев 11б №7**

**Given P address 202.16.175.0 /24**

**R1 –  84 hosts**

**R2 –  52 hosts**

**R3 –  25 hosts**

**WAN1 – 2 hosts**

**WAN2 – 2 hosts**

**WAN3 – 2 hosts**

**Solution**

**1. Initial Network address – 202.16.175.0**

**Subnet mask: 24**

**2. R1 –  84 hosts**

Initial Network address – 202.16.175.0

Number of host bits  - 7

Number of hosts - 128

Subnet mask: - 25

Host Range: - 202.16.175.1 - 202.16.175.126

Broadcast address: - 202.16.175.127

**3. R2 –  52 hosts**

Initial Network address – 202.16.175.128

Number of host bits  - 6

Number of hosts - 64

Subnet mask: - 26

Host Range: - 202.16.175.129 - 202.16.175.190

Broadcast address: - 202.16.175.191

**4. R3 –  25 hosts**

Initial Network address – 202.16.175.192

Number of host bits  - 5

Number of hosts - 32

Subnet mask: - 27

Host Range: - 202.16.175.193 - 202.16.175.222

Broadcast address: - 202.16.175.223

**5. WAN1, WAN2, WAN3 –  2 hosts for each connection**

**WAN1**

Initial Network address – 202.16.175.224

Number of host bits  - 2

Number of hosts - 4

Subnet mask: - 30

Host Range: - 202.16.175.225 - 202.16.175.226

Broadcast address: - 202.16.175.227

**WAN2**

Initial Network address – 202.16.175.228

Number of host bits  - 2

Number of hosts - 4

Subnet mask: - 30

Host Range: - 202.16.175.229 - 202.16.175.230

Broadcast address: - 202.16.175.231

**WAN3**

Initial Network address – 202.16.175.232

Number of host bits  - 2

Number of hosts - 4

Subnet mask: - 30

Host Range: - 202.16.175.233 - 202.16.175.234

Broadcast address: - 202.16.175.235