Output:

Enter the IP Address:

192.168.0.1

IP Address in binary is

11000000

10101000

00000000

00000001

Enter number of subnets required:

9

The IP Address belongs to class C

Number of bits required for address = 4

Number of subnets: 28

Subnet mask in Binary:

11111111.11111111.11111111.11110000

Subnet mask in decimal

255.255.255.240

Subnet address is = 192.168.0.0

Broadcast address is = 192.168.0.15

Testcase 2:

Enter the IP Address:

132.201.42.1

IP Address in binary is

10000100

11001001

00101010

00000001

Enter number of subnets required:

6

The IP Address belongs to class B

Number of bits required for address = 3

Number of subnets: 19

Subnet mask in Binary:

11111111.11111111.11100000.00000000

Subnet mask in decimal

255.255.224.0

Subnet address is = 132.201.42.0

Broadcast address is = 132.201.42.7