

CSNETWK – IP ADDRESSING PRACTICE EXERCISE

10.50.75.129
255.255.252.0

0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	0	1	0	1	1	.	1	0	0	0	0	0	0	0	1
1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	0	0	.	0	0	0	0	0	0	0	0

10.50.72.0
10.50.75.255

0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	0	1	0	0	0	.	0	0	0	0	0	0	0	0
0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	0	1	0	1	1	.	1	1	1	1	1	1	1	1

Network Address
Broadcast Address

10.50.72.1
10.50.75.254

0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	0	1	0	0	0	.	0	0	0	0	0	0	0	1
0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	0	1	0	1	1	.	1	1	1	1	1	1	1	0

First Usable
Last Usable

192.0.2.56
255.255.224.0

1	1	0	0	0	0	0	0	.	0	0	0	0	0	0	0	0	.	0	0	0	0	0	0	1	0	.	0	0	1	1	1	0	0	0
1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	1	.	1	1	1	0	0	0	0	0	.	0	0	0	0	0	0	0	0

192.0.0.0
192.0.31.255

1	1	0	0	0	0	0	0	.	0	0	0	0	0	0	0	0	.	0	0	0	0	0	0	0	0	.	0	0	0	0	0	0	0	0
1	1	0	0	0	0	0	0	.	0	0	0	0	0	0	0	0	.	0	0	0	1	1	1	1	1	.	1	1	1	1	1	1	1	1

Network Address
Broadcast Address

192.0.0.1
192.0.31.254

1	1	0	0	0	0	0	0	.	0	0	0	0	0	0	0	0	.	0	0	0	0	0	0	0	0	.	0	0	0	0	0	0	0	1
1	1	0	0	0	0	0	0	.	0	0	0	0	0	0	0	0	.	0	0	0	1	1	1	1	1	.	1	1	1	1	1	1	1	0

First Usable
Last Usable

203.0.113.40
255.255.255.248

1	1	0	0	1	0	1	1	.	0	0	0	0	0	0	0	0	.	0	1	1	1	0	0	0	1	.	0	0	1	0	1	0	0	0
1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	1	.	1	1	1	1	1	0	0	0

203.0.113.40
203.0.113.47

1	1	0	0	1	0	1	1	.	0	0	0	0	0	0	0	0	.	0	1	1	1	0	0	0	1	.	0	0	1	0	1	0	0	0
1	1	0	0	1	0	1	1	.	0	0	0	0	0	0	0	0	.	0	1	1	1	0	0	0	1	.	0	0	1	0	1	1	1	1

Network Address
Broadcast Address

203.0.113.41
203.0.113.46

1	1	0	0	1	0	1	1	.	0	0	0	0	0	0	0	0	.	0	1	1	1	0	0	0	1	.	0	0	1	0	1	0	0	1
1	1	0	0	1	0	1	1	.	0	0	0	0	0	0	0	0	.	0	1	1	1	0	0	0	1	.	0	0	1	0	1	1	1	0

First Usable
Last Usable

10.50.90.100
255.255.255.252

0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	1	1	0	1	0	.	0	1	1	0	0	1	0	0
1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	1	1	.	1	1	1	1	1	1	0	0

10.50.90.100
10.50.90.103

0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	1	1	0	1	0	.	0	1	1	0	0	1	0	0
0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	1	1	0	1	0	.	0	1	1	0	0	1	1	1

Network Address
Broadcast Address

10.50.90.101
10.50.90.102

0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	1	1	0	1	0	.	0	1	1	0	0	1	0	1
0	0	0	0	1	0	1	0	.	0	0	1	1	0	0	1	0	.	0	1	0	1	1	0	1	0	.	0	1	1	0	0	1	1	0

First Usable
Last Usable

IP Address	Prefix Length	Subnet Mask	Network Address	Broadcast Address	Usable Address Range
192.168.12.34	/14	255.252.0.0	192.168.0.0	192.171.255.255	192.168.0.1–192.171.255.254
172.20.100.250	/20	255.255.240.0	172.20.96.0	172.20.111.255	172.20.96.1–172.20.111.254
192.168.45.78	/25	255.255.255.128	192.168.45.0	192.168.45.127	192.168.45.1–192.168.45.126
10.100.200.35	/28	255.255.255.240	10.100.200.32	10.100.200.47	10.100.200.33–10.100.200.46
172.31.199.72	/30	255.255.255.252	172.31.199.72	172.31.199.75	172.31.199.73–172.31.199.74
198.51.100.187	/8	255.0.0.0	198.0.0.0	198.255.255.255	198.0.0.1–198.255.255.254
203.0.113.250	/24	255.255.255.0	203.0.113.0	203.0.113.255	203.0.113.1–203.0.113.254
134.34.75.44	/16	255.255.0.0	134.34.0.0	134.34.255.255	134.34.0.1–134.34.255.254
192.168.100.201	/23	255.255.254.0	192.168.100.0	192.168.101.255	192.168.100.1–192.168.101.254
172.15.160.10	/21	255.255.248.0	172.15.160.0	172.15.167.255	172.15.160.1–172.15.167.254
192.168.77.188	/18	255.255.192.0	192.168.64.0	192.168.127.255	192.168.64.1–192.168.127.254
10.55.89.13	/26	255.255.255.192	10.55.89.0	10.55.89.63	10.55.89.1–10.55.89.62
172.31.9.191	/11	255.224.0.0	172.0.0.0	172.31.255.255	172.0.0.1–172.31.255.254
192.168.14.4	/17	255.255.128.0	192.168.0.0	192.168.127.255	192.168.0.1–192.168.127.254
10.175.50.60	/30	255.255.255.252	10.175.50.60	10.175.50.63	10.175.50.61–10.175.50.62
172.20.100.129	/13	255.248.0.0	172.16.0.0	172.23.255.255	172.16.0.1–172.23.255.254
198.51.100.213	/27	255.255.255.224	198.51.100.192	198.51.100.223	198.51.100.193–198.51.100.222
203.0.113.80	/25	255.255.255.128	203.0.113.0	203.0.113.127	203.0.113.1–203.0.113.126
134.33.45.5	/24	255.255.255.0	134.33.45.0	134.33.45.255	134.33.45.1–134.33.45.254
192.0.2.130	/10	255.192.0.0	192.0.0.0	192.63.255.255	192.0.0.1–192.63.255.254
10.23.90.250	/15	255.254.0.0	10.22.0.0	10.23.255.255	10.22.0.1–10.23.255.254
172.16.250.3	/28	255.255.255.240	172.16.250.0	172.16.250.15	172.16.250.1–172.16.250.14
198.51.100.15	/10	255.192.0.0	192.0.0.0	192.63.255.255	192.0.0.1–192.63.255.254
203.0.113.170	/16	255.255.0.0	203.0.0.0	203.0.255.255	203.0.0.1–203.0.255.254
134.100.10.200	/22	255.255.252.0	134.100.8.0	134.100.11.255	134.100.8.1–134.100.11.254
10.32.10.100	/19	255.255.224.0	10.32.0.0	10.32.31.255	10.32.0.1–10.32.31.254
192.168.200.1	/30	255.255.255.252	192.168.200.0	192.168.200.3	192.168.200.1–192.168.200.2
172.17.100.1	/25	255.255.255.128	172.17.100.0	172.17.100.127	172.17.100.1–172.17.100.126

192.168.50.150	/28	255.255.255.240	192.168.50.144	192.168.50.159	192.168.50.145–192.168.50.158
10.60.15.75	/16	255.255.0.0	10.60.0.0	10.60.255.255	10.60.0.1–10.60.255.254
172.18.30.22	/29	255.255.255.248	172.18.30.16	172.18.30.23	172.18.30.17–172.18.30.22
192.0.2.100	/22	255.255.252.0	192.0.0.0	192.0.3.255	192.0.0.1–192.0.3.254
134.120.88.250	/26	255.255.255.192	134.120.88.192	134.120.88.255	134.120.88.193–134.120.88.254
172.21.90.123	/23	255.255.254.0	172.21.90.0	172.21.91.255	172.21.90.1–172.21.91.254
192.168.90.40	/24	255.255.255.0	192.168.90.0	192.168.90.255	192.168.90.1–192.168.90.254
172.19.32.15	/16	255.255.0.0	172.19.0.0	172.19.255.255	172.19.0.1–172.19.255.254
172.11.12.3	/30	255.255.255.252	172.11.12.0	172.11.12.3	172.11.12.1–172.11.12.2
192.168.1.129	/27				
134.25.50.56	/22				
203.0.113.205	/25				
10.10.5.100	/30				
10.16.120.245	/9				
192.168.199.44		255.255.254.0			
134.200.78.25		255.255.255.0			
203.0.113.61		255.255.255.192			
172.17.50.98		255.240.0.0			
10.50.90.100		255.255.255.252			