INSTITUTO TECNOLOGICO DE CANCUN

LEON QUEB MIGUEL ANGEL

ISMAEL JIMENEZ SANCHEZ

FUND. TELECOMUNICACIONES

HORARIO

17:00 – 18:00

Cálculo de redes

- Ejercicio

- **172.16.0.0/19**

IP	10101100	00010000	00000000	00000000	172.16.0.0
MASK	11111111	11111111	11100000	00000000	255.255.224.0
ID	10101100	00010000	00000000	00000000	172.16.0.0/19
WCARD	00000000	00000000	00011111	11111111	0.0.31.255
BCAST	10101100	00010000	00011111	11111111	172.16.31.255
1era IP	10101100	00010000	00000000	00000001	172.16.0.1
Ult IP	10101100	00010000	00011111	11111110	172.16.31.254

- **172.16.0.0/21**

IP	10101100	00010000	00000000	00000000	172.16.0.0
MASK	11111111	11111111	11111000	00000000	255.255.248.0
ID	10101100	00010000	00000000	00000000	172.16 0.0/21
WCARD	00000000	00000000	00000111	11111111	0.0.7.255
BCAST	10101100	00010000	00000111	11111111	172.16.7.255
1era IP	10101100	00010000	00000000	00000001	172.16.0.1
Ult IP	10101100	00010000	00000111	11111110	172.16.7.254

- **172.16.8.0/22**

IP	10101100	00010000	00001000	00000000	172.16.8.0
MASK	11111111	11111111	11111100	00000000	255.255.252.0
ID	10101100	00010000	00001000	00000000	172.16 8.0/22
WCARD	00000000	00000000	00000011	11111111	0.0.3.255
BCAST	10101100	00010000	00001011	11111111	172.16.11.255
1era IP	10101100	00010000	00001000	00000001	172.16.8.1
Ult IP	10101100	00010000	00001011	11111110	172.16.11.254

- 172.16.12.0/22

IP	10101100	00010000	00001100	00000000	172.16.12.0
MASK	11111111	11111111	11111100	00000000	255.255.252.0
ID	10101100	00010000	00001100	00000000	172.16 12.0/22
WCARD	00000000	00000000	00000011	11111111	0.0.3.255
BCAST	10101100	00010000	00001111	11111111	172.16.15.255
1era IP	10101100	00010000	00001100	00000001	172.16.12.1
Ult IP	10101100	00010000	00001111	11111110	172.16.16.254

- 172.16.16.0/23

IP	10101100	00010000	00010000	00000000	172.16.16.0
MASK	11111111	11111111	11111110	00000000	255.255.254.0
ID	10101100	00010000	00010000	00000000	172.16 16.0/23
WCARD	00000000	00000000	00000001	11111111	0.0.1.255
BCAST	10101100	00010000	00010001	11111111	172.16.17.255
1era IP	10101100	00010000	00010000	00000001	172.16.16.1
Ult IP	10101100	00010000	00010001	11111110	172.16.17.254

- 172.16.18.0/23

IP	10101100	00010000	00010010	00000000	172.16.18.0
MASK	11111111	11111111	11111110	00000000	255.255.254.0
ID	10101100	00010000	00010010	00000000	172.16 18.0/23
WCARD	00000000	00000000	00000001	11111111	0.0.1.255
BCAST	10101100	00010000	00010010	11111111	172.16.18.255
1era IP	10101100	00010000	00010010	00000001	172.16.18.1
Ult IP	10101100	00010000	00010010	11111110	172.16.18.254

- 172.16.20.0/24

IP	10101100	00010000	00010100	00000000	172.16.20.0
MASK	11111111	11111111	11111111	00000000	255.255.255.0

ID	10101100	00010000	00010100	00000000	172.16 20.0/24
WCARD	00000000	00000000	00000000	11111111	0.0.0.255
BCAST	10101100	00010000	00010100	11111111	172.16.20.255
1era IP	10101100	00010000	00010100	00000001	172.16.20.1
Ult IP	10101100	00010000	00010100	11111110	172.16.20.254

- 172.16.21.0/24

IP	10101100	00010000	00010101	00000000	172.16.21.0
MASK	11111111	11111111	11111111	00000000	255.255.255.0
ID	10101100	00010000	00010101	00000000	172.16 21.0/24
WCARD	00000000	00000000	00000000	11111111	0.0.0.255
BCAST	10101100	00010000	00010101	11111111	172.16.21.255
1era IP	10101100	00010000	00010101	00000001	172.16.21.1
Ult IP	10101100	00010000	00010101	11111110	172.16.21.254

- 172.16.22.0/24

IP	10101100	00010000	00010110	00000000	172.16.22.0
MASK	11111111	11111111	11111111	00000000	255.255.255.0
ID	10101100	00010000	00010110	00000000	172.16 22.0/24
WCARD	00000000	00000000	00000000	11111111	0.0.0.255
BCAST	10101100	00010000	00010110	11111111	172.16.22.255
1era IP	10101100	00010000	00010110	00000001	172.16.22.1
Ult IP	10101100	00010000	00010110	11111110	172.16.22.254

- 172.16.23.0/25

IP	10101100	00010000	00010111	00000000	172.16.23.0
MASK	11111111	11111111	11111111	10000000	255.255.255.128
ID	10101100	00010000	00010111	00000000	172.16 23.0/25
WCARD	00000000	00000000	00000000	01111111	0.0.0.127
BCAST	10101100	00010000	00010111	01111111	172.16.23.127
1era IP	10101100	00010000	00010111	00000001	172.16.23.1

Ult IP	10101100	00010000	00010111	01111110	172.16.23.126

- 172.16.23.128/26

IP	10101100	00010000	00010111	10000000	172.16.23.128
MASK	11111111	11111111	11111111	11000000	255.255.255.192
ID	10101100	00010000	00010111	10000000	172.16.23.128/26
WCARD	00000000	00000000	00000000	00111111	0.0.0.63
BCAST	10101100	00010000	00010111	10111111	172.16.23.191
1era IP	10101100	00010000	00010111	10000001	172.16.23.129
Ult IP	10101100	00010000	00001011	10111110	172.16.23.190