

Actividad Mapa de Índices

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Ejercicio:

EJERCICIO MAPA-BITS

CUSTOMER	MARITAL-STATUS	REGION	G-ENDER	INCOME-LEVEL
101	single	east	male	b-1
102	married	central	female	b-4
103	married	west	female	b-2
104	divorced	west	male	b-4
105	single	central	female	b-2
106	married	central	female	b-3

Vamos utilizar mapas de bits para resolver la siguiente consulta SQL

```
SELECT COUNT(*)  
FROM CUSTOMER  
WHERE MARITAL-STATUS = 'married' AND REGION IN ('central', 'west');
```

Para cada bit-map necesitamos:

- MARITAL-STATUS = 3 valores x 6 filas = 18 bits
- REGION = 3 valores x 6 filas = 18 bits

MAPAS-BITS

MARITAL-STATUS = 'married' AND REGION IN ('central', 'west')

single	married	divorced
0	0	0
0	1	0
0	1	0
0	0	1
1	0	0
0	1	0

central	east	west
0	1	0
1	0	0
0	0	1
0	0	1
1	0	0
1	0	0

(fila 2, fila 3, fila 6) AND (fila 2, fila 3, ~~fila 4~~, ~~fila 5~~, ~~fila 6~~)

↓

[= fila 2, fila 3, fila 6]

El WHERE, utilizando bit-map, nos devuelve las fila 2, fila 3 y fila 6 como coincidencias. El resultado tras pasar por el COUNT (*) es 3

