Taller SQL - Parte 2

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1.a <u>Cláusula SQL utilizada</u>:

```
SELECT nombreTablaFinal AS NombreTabla,
       COALESCE(numCol, 0) AS NumColumnas,
       COALESCE(numNull, 0) AS NumColsNull,
       COALESCE(numFK, 0) AS NumColsFKs

FROM (((SELECT TABLE_NAME AS nombreTablaFinal, COUNT(NULLABLE) numCol

        FROM (SELECT *

              FROM ALL_TAB_COLUMNS

              WHERE owner='PARRANDEROS')

      GROUP BY TABLE_NAME) T1

          FULL OUTER JOIN

      (SELECT TABLE_NAME AS nombreTabla, COALESCE(COUNT(NULLABLE), 0) as
              numNull

        FROM (SELECT *

              FROM ALL_TAB_COLUMNS

              WHERE owner='PARRANDEROS' AND NULLABLE = 'Y')

      GROUP BY TABLE_NAME) T2 ON T1.nombreTablaFinal=T2.nombreTabla)

          FULL OUTER JOIN

      (SELECT TABLE_NAME AS nombreTabla, COUNT(*) AS numFk

        FROM (SELECT *

              FROM ALL_CONS_COLUMNS

              WHERE owner='PARRANDEROS' AND CONSTRAINT_NAME LIKE 'FK%')

      GROUP BY TABLE_NAME) T3 ON NOMBRETABLAFINAL=T3.NOMBRETABLA)
ORDER BY NombreTabla;
```

<u>Captura de cláusula</u>:

```
SELECT nombreTablaFinal AS NombreTabla, COALESCE(numCol, 0) AS NumColumnas,
        COALESCE(numNull, 0) AS NumColsNull, COALESCE(numFK, 0) AS NumColsFKs
FROM(((SELECT TABLE_NAME AS nombreTablaFinal, COUNT(NULLABLE) numCol
      FROM (SELECT *
            FROM ALL_TAB_COLUMNS
            WHERE owner='PARRANDEROS')
      GROUP BY TABLE_NAME) T1
       FULL OUTER JOIN
     (SELECT TABLE_NAME AS nombreTabla, COALESCE(COUNT(NULLABLE), 0)  as numNull
      FROM (SELECT *
            FROM ALL_TAB_COLUMNS
            WHERE owner='PARRANDEROS' AND NULLABLE = 'Y')
      GROUP BY TABLE_NAME) T2 ON T1.nombreTablaFinal=T2.nombreTabla)
       FULL OUTER JOIN
     (SELECT TABLE_NAME AS nombreTabla, COUNT(*) AS numFk
      FROM (SELECT *
            FROM ALL_CONS_COLUMNS
            WHERE owner='PARRANDEROS' AND CONSTRAINT_NAME LIKE 'FK%')
      GROUP BY TABLE_NAME) T3 ON NOMBRETABLAFINAL=T3.NOMBRETABLA)
ORDER BY NombreTabla;
```

Resultados en sqlDeveloper:

NOMBRETABLA	NUMCOLUMNAS	NUMCOLSNULL	NUMCOLSFKS
1 BARES	5	4	0
2 BEBEDORES	4	3	0
3 BEBIDAS	4	3	1
4 FRECUENTAN	4	1	2
5 GUSTAN	2	2	2
6 SIRVEN	3	0	2
7 TIPO_BEBIDA	2	1	0

1.b Cláusula SQL utilizada:

```
SELECT t.TABLE_NAME AS NombreTabla,

       (SELECT COUNT(*) FROM ALL_TAB_COLUMNS WHERE
OWNER='PARRANDEROS' AND TABLE_NAME = t.TABLE_NAME) AS NumColumnas,

       (SELECT COUNT(*) FROM ALL_TAB_COLUMNS WHERE
OWNER='PARRANDEROS' AND TABLE_NAME = t.TABLE_NAME AND NULLABLE =
'Y') AS NumColsNull,

       (SELECT COUNT(*) FROM ALL_CONS_COLUMNS WHERE
OWNER='PARRANDEROS' AND CONSTRAINT_NAME LIKE 'FK%' AND TABLE_NAME =
t.TABLE_NAME) AS NumColsFKs

FROM ALL_TABLES t

WHERE t.OWNER='PARRANDEROS'

ORDER BY NombreTabla;
```

```sql
SELECT t.TABLE_NAME AS NombreTabla,
      (SELECT COUNT(*) FROM ALL_TAB_COLUMNS WHERE OWNER='PARRANDEROS' AND TABLE_NAME = t.TABLE_NAME) AS NumColumnas,
      (SELECT COUNT(*) FROM ALL_TAB_COLUMNS WHERE OWNER='PARRANDEROS' AND TABLE_NAME = t.TABLE_NAME AND NULLABLE = 'Y') AS NumColsNull,
      (SELECT COUNT(*) FROM ALL_CONS_COLUMNS WHERE OWNER='PARRANDEROS' AND CONSTRAINT_NAME LIKE 'FK%' AND TABLE_NAME = t.TABLE_NAME) AS NumColsFKs
FROM ALL_TABLES t
WHERE t.OWNER='PARRANDEROS'
ORDER BY NombreTabla;
```

Resultados en sqlDeveloper:

	NOMBRETABLA	NUMCOLUMNAS	NUMCOLSNULL	NUMCOLSFKS
1	BARES	5	4	0
2	BEBEDORES	4	3	0
3	BEBIDAS	4	3	1
4	FRECUENTAN	4	1	2
5	GUSTAN	2	2	2
6	SIRVEN	3	0	2
7	TIPO_BEBIDA	2	1	0

2. Cláusula SQL utilizada:

```sql
SELECT table_name AS NombreTabla,
          column_name AS NombreColsPK,
               data_type AS TipoDeDato

FROM ( (SELECT *

          FROM ALL_TAB_COLUMNS

          WHERE owner='PARRANDEROS')

               NATURAL INNER JOIN

          (SELECT *

          FROM ALL_CONS_COLUMNS

          WHERE owner='PARRANDEROS') )

     WHERE constraint_name LIKE 'PK%'

     ORDER BY NombreTabla, NombreColsPK;
```

Captura de cláusula:

```sql
SELECT table_name AS NombreTabla, column_name AS NombreColsPK, data_type AS TipoDeDato
FROM( (SELECT *
      FROM ALL_TAB_COLUMNS
      WHERE owner='PARRANDEROS')
       NATURAL INNER JOIN
      (SELECT *
       FROM ALL_CONS_COLUMNS
       WHERE owner='PARRANDEROS') )
WHERE constraint_name LIKE 'PK%'
ORDER BY NombreTabla, NombreColsPK;
```

Resultados en sqlDeveloper:

	NOMBRETABLA	NOMBRECOLSPK	TIPODEDATO
1	BARES	ID	NUMBER
2	BEBEDORES	ID	NUMBER
3	BEBIDAS	ID	NUMBER
4	FRECUENTAN	HORARIO	VARCHAR2
5	FRECUENTAN	ID_BAR	NUMBER
6	FRECUENTAN	ID_BEBEDOR	NUMBER
7	GUSTAN	ID_BEBEDOR	NUMBER
8	GUSTAN	ID_BEBIDA	NUMBER
9	SIRVEN	HORARIO	VARCHAR2
10	SIRVEN	ID_BAR	NUMBER
11	SIRVEN	ID_BEBIDA	NUMBER
12	TIPO_BEBIDA	ID	NUMBER

3. Cláusula SQL utilizada:

```
SELECT table_name as NombreTabla,
      data_type AS TipoDeDato,
      COUNT (*) AS NumColsTipoDato,
      ROUND(AVG(avg_col_len), 2) AS PromedioLongitudCol

FROM ( (SELECT *

        FROM ALL_TAB_COLUMNS

        WHERE owner='PARRANDEROS') )

GROUP BY table_name, data_type

ORDER BY NombreTabla, TipoDeDato, NumColsTipoDato;
```

Captura de cláusula:

```
SELECT table_name as NombreTabla, data_type AS TipoDeDato,
    COUNT (*) AS NumColsTipoDato, ROUND(AVG(avg_col_len), 2) AS PromedioLongitudCol
FROM( (SELECT *
       FROM ALL_TAB_COLUMNS
       WHERE owner='PARRANDEROS') )
GROUP BY table_name, data_type
ORDER BY NombreTabla, TipoDeDato, NumColsTipoDato;
```

Resultados en sqlDeveloper:

	NOMBRETABLA	TIPODEDATO	NUMCOLSTIPODATO	PROMEDIOLONGITUDCOL
1	BARES	NUMBER	2	3
2	BARES	VARCHAR2	3	10,33
3	BEBEDORES	NUMBER	1	4
4	BEBEDORES	VARCHAR2	3	10,67
5	BEBIDAS	NUMBER	3	3,33
6	BEBIDAS	VARCHAR2	1	11
7	FRECUENTAN	DATE	1	8
8	FRECUENTAN	NUMBER	2	3,5
9	FRECUENTAN	VARCHAR2	1	8
10	GUSTAN	NUMBER	2	4
11	SIRVEN	NUMBER	2	3,5
12	SIRVEN	VARCHAR2	1	8
13	TIPO_BEBIDA	NUMBER	1	3
14	TIPO_BEBIDA	VARCHAR2	1	9

4. Cláusula SQL utilizada:

```
SELECT T2.table_name AS NombreTabla,
    T2.column_name AS NombreColumna,
    T2.data_type AS TipoDeDato,
    COALESCE(T1.constraint_name, 'NO TIENE') AS NombreRestriccion,
    T2.nullable AS PermiteNulos

FROM( (SELECT *

      FROM ALL_CONS_COLUMNS

      WHERE owner='PARRANDEROS') T1

          RIGHT OUTER JOIN

        (SELECT *

        FROM ALL_TAB_COLUMNS

        WHERE owner='PARRANDEROS') T2 ON (T1.table_name=T2.table_name
                AND T1.column_name=T2.column_name) )

    ORDER BY NombreTabla, NombreColumna, NombreRestriccion;
```

Captura de cláusula:

```sql
SELECT T2.table_name AS NombreTabla, T2.column_name AS NombreColumna, T2.data_type AS TipoDeDato,
       COALESCE(T1.constraint_name, 'NO TIENE') AS NombreRestriccion, T2.nullable AS PermiteNulos
FROM( (SELECT *
       FROM ALL_CONS_COLUMNS
       WHERE owner='PARRANDEROS') T1
           RIGHT OUTER JOIN
       (SELECT *
        FROM ALL_TAB_COLUMNS
        WHERE owner='PARRANDEROS') T2 ON (T1.table_name=T2.table_name AND T1.column_name=T2.column_name) )
ORDER BY NombreTabla, NombreColumna, NombreRestriccion;
```

Resultados en sqlDeveloper:

	NOMBRETABLA	NOMBRECOLUMNA	TIPODEDATO	NOMBRERESTRICCION	PERMITENULOS
1	BARES	CANT_SEDES	NUMBER	CK_CANTSEDES	Y
2	BARES	CIUDAD	VARCHAR2	NO TIENE	Y
3	BARES	ID	NUMBER	PK_BARES	N
4	BARES	NOMBRE	VARCHAR2	NO TIENE	Y
5	BARES	PRESUPUESTO	VARCHAR2	CK_PRESUPUESTO	Y
6	BEBEDORES	CIUDAD	VARCHAR2	NO TIENE	Y
7	BEBEDORES	ID	NUMBER	PK_BEBEDORES	N
8	BEBEDORES	NOMBRE	VARCHAR2	NO TIENE	Y
9	BEBEDORES	PRESUPUESTO	VARCHAR2	CK_BEBEDORES_PRESUPUESTO	Y
10	BEBIDAS	GRADO_ALCOHOL	NUMBER	CK_GRADOALCHL	Y
11	BEBIDAS	ID	NUMBER	PK_BEBIDAS	N
12	BEBIDAS	NOMBRE	VARCHAR2	NO TIENE	Y
13	BEBIDAS	TIPO	NUMBER	FK_B_TIPO_BEBIDA	Y
14	FRECUENTAN	FECHA_ULTIMA_VISITA	DATE	NO TIENE	Y
15	FRECUENTAN	HORARIO	VARCHAR2	CK_HORARIO	N
16	FRECUENTAN	HORARIO	VARCHAR2	PK_FRECUENTAN	N
17	FRECUENTAN	ID_BAR	NUMBER	FK_F_BARES	N
18	FRECUENTAN	ID_BAR	NUMBER	PK_FRECUENTAN	N
19	FRECUENTAN	ID_BEBEDOR	NUMBER	FK_F_BEBEDOR	N
20	FRECUENTAN	ID_BEBEDOR	NUMBER	PK_FRECUENTAN	N
21	GUSTAN	ID_BEBEDOR	NUMBER	FK_G_BEBEDOR	Y
22	GUSTAN	ID_BEBEDOR	NUMBER	PK_GUSTAN	Y
23	GUSTAN	ID_BEBIDA	NUMBER	FK_G_BEBIDAS	Y
24	GUSTAN	ID_BEBIDA	NUMBER	PK_GUSTAN	Y

	NOMBRETABLA	NOMBRECOLUMNA	TIPODEDATO	NOMBRERESTRICCION	PERMITENULOS
24	GUSTAN	ID_BEBIDA	NUMBER	PK_GUSTAN	Y
25	SIRVEN	HORARIO	VARCHAR2	CK_S_HORARIO	N
26	SIRVEN	HORARIO	VARCHAR2	PK_SIRVEN	N
27	SIRVEN	ID_BAR	NUMBER	FK_S_BARES	N
28	SIRVEN	ID_BAR	NUMBER	PK_SIRVEN	N
29	SIRVEN	ID_BEBIDA	NUMBER	FK_S_BEBIDAS	N
30	SIRVEN	ID_BEBIDA	NUMBER	PK_SIRVEN	N
31	TIPO_BEBIDA	ID	NUMBER	PK_TIPOBEBIDA	N
32	TIPO_BEBIDA	NOMBRE	VARCHAR2	NO TIENE	Y

5. Cláusula SQL utilizada:

a) SELECT column_name, 'SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS
                 WHERE ' || column_name || ' = column_name GROUP BY
                 table_name;' AS sentencia

        FROM ALL_CONS_COLUMNS

WHERE owner='PARRANDEROS' AND LENGTH(column_name) > 6;

b)

Captura de cláusula:

a)

```
(SELECT column_name, 'SELECT table_name, COUNT(*) FROM  ALL_CONS_COLUMNS WHERE ' || column_name || ' = column_name GROUP BY table_name;' AS sentencia
FROM ALL_CONS_COLUMNS
WHERE owner='PARRANDEROS' AND LENGTH(column_name) > 6);
```


b)

Resultados en sqlDeveloper:

a)

	COLUMN_NAME	SENTENCIA
1	PRESUPUESTO	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE PRESUPUESTO = column_name GROUP BY table_name;
2	PRESUPUESTO	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE PRESUPUESTO = column_name GROUP BY table_name;
3	CANT_SEDES	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE CANT_SEDES = column_name GROUP BY table_name;
4	GRADO_ALCOHOL	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE GRADO_ALCOHOL = column_name GROUP BY table_name;
5	ID_BEBEDOR	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE ID_BEBEDOR = column_name GROUP BY table_name;
6	HORARIO	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE HORARIO = column_name GROUP BY table_name;
7	HORARIO	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE HORARIO = column_name GROUP BY table_name;
8	ID_BEBIDA	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE ID_BEBIDA = column_name GROUP BY table_name;
9	ID_BEBEDOR	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE ID_BEBEDOR = column_name GROUP BY table_name;
10	ID_BEBIDA	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE ID_BEBIDA = column_name GROUP BY table_name;
11	HORARIO	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE HORARIO = column_name GROUP BY table_name;
12	HORARIO	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE HORARIO = column_name GROUP BY table_name;
13	ID_BEBEDOR	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE ID_BEBEDOR = column_name GROUP BY table_name;
14	ID_BEBEDOR	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE ID_BEBEDOR = column_name GROUP BY table_name;
15	ID_BEBIDA	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE ID_BEBIDA = column_name GROUP BY table_name;
16	ID_BEBIDA	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE ID_BEBIDA = column_name GROUP BY table_name;
17	PRESUPUESTO	SELECT table_name, COUNT(*) FROM ALL_CONS_COLUMNS WHERE PRESUPUESTO = column_name GROUP BY table_name;