

Sistemas MultiDimensionales

Práctica 3_2. Pentaho Aggregation Designer,
MDX, SQL3 (PostgreSQL)

Ejercicio: MDX, SQL3 y Agregados



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Consulta MDX

Título: mujeres por decenio y municipio.

Consulta:

```
SELECT
    {[Measures].[Mujeres]} ON COLUMNS,
    NON EMPTY
    CrossJoin(
        [Cuando].[Decenio].Members,
        [Donde].[Municipio].Members
    ) ON ROWS
FROM [Padron]
```

The screenshot shows the Schema Workbench application window. The title bar reads 'Schema Workbench'. The menu bar includes 'File', 'Edit', 'View', 'Options', 'Windows', and 'Help'. Below the menu is a toolbar with icons for file operations. The main window is titled 'MDX Query - connected to madrid_anarajer.xml'. It has a 'Schema' dropdown set to '1 madrid_anarajer.xml' and a 'Connect' button. The query editor contains the following MDX query:

```
SELECT
    {[Measures].[Mujeres]} ON COLUMNS,
    NON EMPTY
    CrossJoin(
        [Cuando].[Decenio].Members,
        [Donde].[Municipio].Members
    ) ON ROWS
FROM [Padron]
```

Below the query editor, the results are displayed as a list of rows, each with a row number and a numerical value:

Row #679:	7.563
Row #680:	333.998
Row #681:	7.119
Row #682:	9.375
Row #683:	1.208
Row #684:	22.334
Row #685:	11.423
Row #686:	24.132
Row #687:	24.832
Row #688:	11.744
Row #689:	33.460
Row #690:	202.594
Row #691:	17.314
Row #692:	6.600
Row #693:	3.934
Row #694:	3.977
Row #695:	1.652
Row #696:	155.467
Row #697:	4.334
Row #698:	1.147
Row #699:	5.482
Row #700:	13.969
Row #701:	63.307
Row #702:	20.954
Row #703:	3.420
Row #704:	5.598
Row #705:	15.932
Row #706:	3.311
Row #707:	7.743
Row #708:	45.209
Row #709:	6.845
Row #710:	3.263
Row #711:	1.521
Row #712:	2.549
Row #713:	8.489
Row #714:	1.873

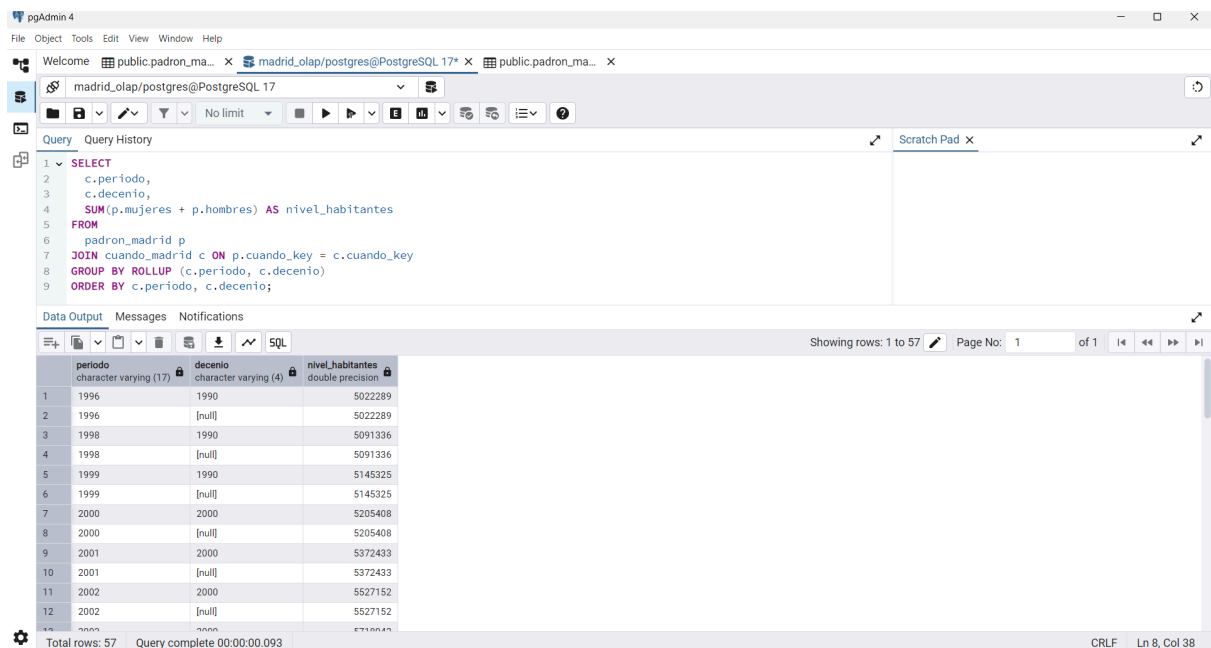
At the bottom of the window, there is an 'Execute' button.

Consulta SQL3 (GROUP BY ROLLUP)

Título: nivel de habitantes por decenio y periodo.

Consulta:

```
SELECT
  c.periodo,
  c.decenio,
  SUM(p.muñeres + p.hombres) AS nivel_habitantes
FROM
  padron_madrid p
JOIN cuando_madrid c ON p.cuando_key = c.cuando_key
GROUP BY ROLLUP (c.periodo, c.decenio)
ORDER BY c.periodo, c.decenio;
```

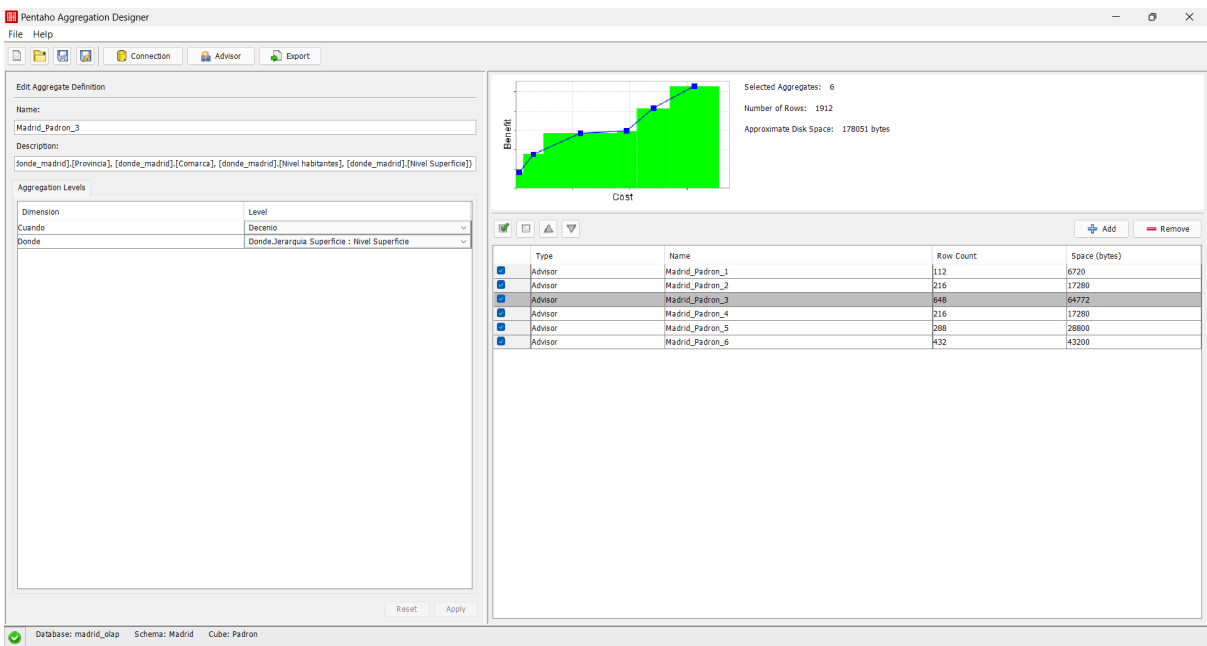


The screenshot shows the pgAdmin 4 interface. The SQL query is entered in the 'Query' tab, and the 'Data Output' tab displays the results of the query. The results are shown in a table with 3 columns: 'periodo', 'decenio', and 'nivel_habitantes'. The table contains 12 rows of data, showing the population level for different periods and decades.

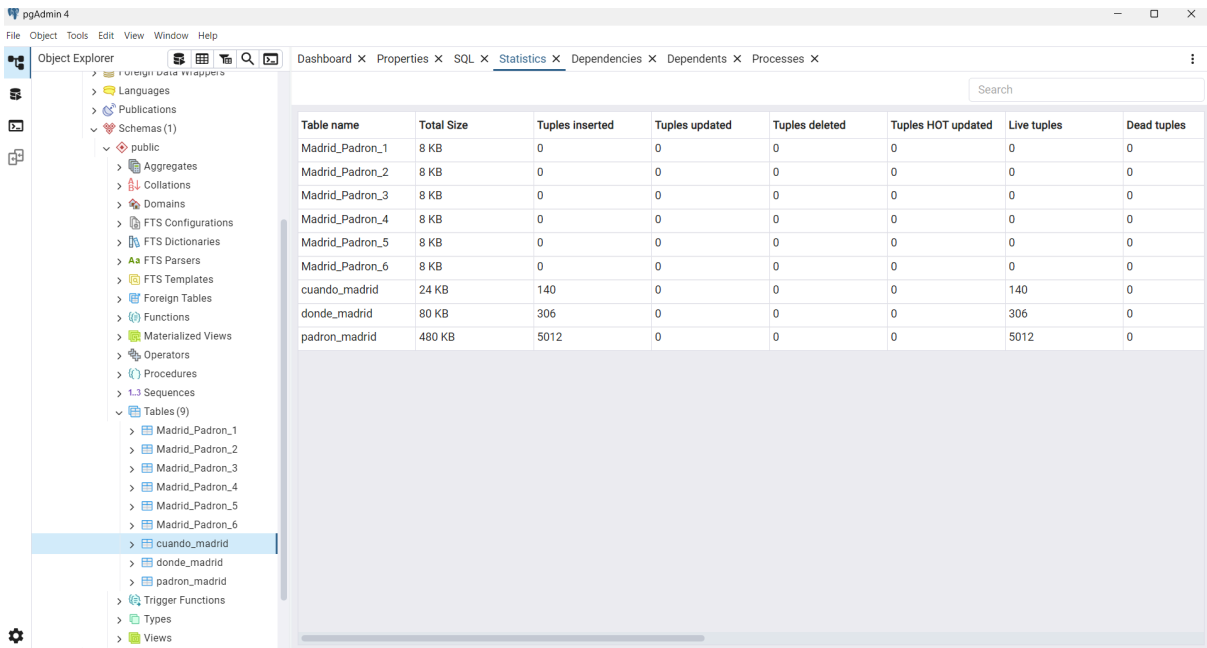
	periodo character varying (17)	decenio character varying (4)	nivel_habitantes double precision
1	1996	1990	5022289
2	1996	[null]	5022289
3	1998	1990	5091336
4	1998	[null]	5091336
5	1999	1990	5145325
6	1999	[null]	5145325
7	2000	2000	5205408
8	2000	[null]	5205408
9	2001	2000	5372433
10	2001	[null]	5372433
11	2002	2000	5527152
12	2002	[null]	5527152

Total rows: 57 Query complete 00:00:00.093

Obtención de los agregados



El agregado con mayor número de instancias es el tercero.



Se han añadido a la base de datos todos los 6 agregados recomendados.