

All Group-Level Subtotals with CUBE - Correct Answer

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Daily XP 326

Exercise

All group-level subtotals

You want to break down all medals awarded to Russia in the 2012 Olympic games per gender and medal type. Since the medals all belong to one country, Russia, it makes sense to generate all possible subtotals (Gender- and Medal-level subtotals), as well as a grand total.

Generate a breakdown of the medals awarded to Russia per country and medal type, including all group-level subtotals and a grand total.

Instructions 100 XP

- Count the medals awarded per gender and medal type.
- Generate all possible group-level counts (per gender and medal type subtotals and the grand total).

Take Hint (-30 XP)

query.sql

```
1 -- Count the medals per gender and medal type
2 SELECT
3     ---,
4     ---,
5     --- AS Awards
6 FROM Summer_Medals
7 WHERE
8     Year = 2012
9     AND Country = 'RUS'
10 -- Get all possible group-level subtotals
11 GROUP BY ---
12 ORDER BY Gender ASC, Medal ASC;
```

Run Code Submit Answer

query result summer_medals

No query executed yet...

Showing 0 out of 0 rows

You want to break down all medals awarded to Russia in the 2012 Olympic games per gender and medal type. This includes generating all possible subtotals (Gender- and Medal-level subtotals) as well as a grand total.

Correct Answer

```
-- Count the medals per gender and medal type
SELECT
    Gender,
    Medal,
    COUNT(*) AS Awards
```

```
FROM Summer_Medals
WHERE
  Year = 2012
  AND Country = 'RUS'
-- Generate all possible group-level subtotals using CUBE
GROUP BY CUBE(Gender, Medal)
ORDER BY Gender ASC, Medal ASC;
```

Explanation

1. **Filtering Criteria:**

- `Year = 2012`: Focuses the query on medals awarded in the 2012 Olympics.
- `Country = 'RUS'`: Filters the results to only include medals won by Russia.

2. **Aggregation:**

- `COUNT(*) AS Awards`: Counts the total number of medals for each grouping combination.

3. **Using CUBE for Grouping:**

- `GROUP BY CUBE(Gender, Medal)`: Automatically generates all group-level subtotals:
 - `(Gender, Medal)`: Medals grouped by both gender and medal type.
 - `(Gender)`: Subtotals grouped only by gender.
 - `(Medal)`: Subtotals grouped only by medal type.
 - `()`: Computes the grand total across all categories.

4. **Sorting:**

- `ORDER BY Gender ASC, Medal ASC`: Displays results ordered by gender and medal type for clarity.