

## QUESTION 3

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### Query :

(a) **Goal:** Summarizing Data in Groups

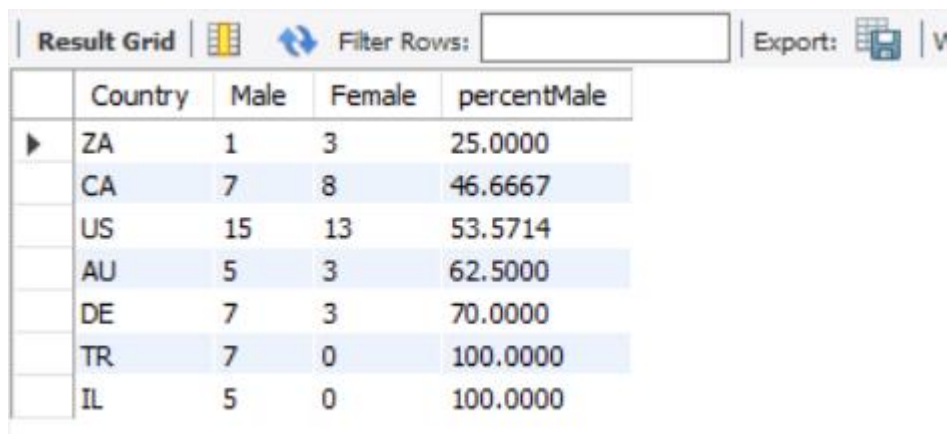
**Table:** customer

**Query:** Write a query that displays the following statistics for each country:

- Total number of customers
- Total number of male customers
- Total number of female customers
- Percent of all customers that are male (Percent Male).

Display the result by value of Percent Male so that the country with the lowest value is listed first, with the remaining countries following in ascending order.

### Output:



The screenshot shows a database interface with a 'Result Grid' tab. The grid displays a table with 5 columns: Country, Male, Female, and percentMale. The data is sorted by percentMale in ascending order. The table has 7 rows of data. Above the table, there is a 'Filter Rows' input field and an 'Export' button.

	Country	Male	Female	percentMale
▶	ZA	1	3	25.0000
	CA	7	8	46.6667
	US	15	13	53.5714
	AU	5	3	62.5000
	DE	7	3	70.0000
	TR	7	0	100.0000
	IL	5	0	100.0000

### Query :

(b) **Goal:** Summarizing Data in Groups

**Table:** product\_dim, order\_fact

**Query:** Create a result by combining two tables.

- Include columns Product\_ID, Product\_Name from product\_dim table.
- Include a column with the label Total Sold. Use a summary function to create this column, which displays the quantity sold for each product.
- Specifies the tables product\_dim, with the alias p and order\_fact with the alias o.
- Join the tables by matching the values of the appropriate columns in each table.
- Groups the results by Product\_ID from product\_dim table and Product\_Name.
- Orders the rows so that products with the highest number sold appear at the top of the report and then by Product\_Name.

Note: DO NOT use nested queries

### Output:

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	product_id	product_name	totalsold
▶	2.30101E+11	Backpack Flag, 6,5x9 Cm.	153
	2.30101E+11	Basic 10, Left , Yellow/Black	153
	2.30101E+11	Collapsible Water Can	153
	2.30101E+11	Comfort Shelter	153
	2.30101E+11	Cup Picnic Mug 25 Cl.	153
	2.30101E+11	Dome Tent Monodome Alu	153
	2.30101E+11	Expedition 10,Small,Left,Blue Ribbon	153
	2.30101E+11	Expedition 10,Small,Right,Blue Ribbon	153
	2.30101E+11	Expedition 20,Large,Right,Forestgreen	153

## Query :

(c) **Goal:** Create a result with a self-join.

**Table:** employee\_addresses, staff

**Query:** Display result of all trainees and workers at company. For each trainee or temporary worker, the report should include the employee ID, name and job title, and manager ID and name. The report should be ordered by Employee\_ID.

Result Grid

Filter Rows:

Export:

Wrap Cell Content:

	employee_ID	employee_Name	Job_Title	Manager_ID	Manager_Name
▶	120181	Cantatore, Lorian	Temp. Sales Rep.	120103	Dawes, Wilson
	120182	Barreto, Geok-Seng	Temp. Sales Rep.	120103	Dawes, Wilson
	120183	Blanton, Brig	Temp. Sales Rep.	120103	Dawes, Wilson
	120184	Moore, Ari	Temp. Sales Rep.	120103	Dawes, Wilson
	120185	Bahlman, Sharon	Temp. Sales Rep.	120103	Dawes, Wilson
	120186	Quinby, Merryn	Temp. Sales Rep.	120103	Dawes, Wilson
	120187	Catenacci, Reyne	Temp. Sales Rep.	120103	Dawes, Wilson
	120189	Lachlan, Mihailo	Temp. Sales Rep.	120103	Dawes, Wilson
	120190	Czernezkyi, Ivor	Trainee	120103	Dawes, Wilson

Result 2

▼

## Query :

(d) **Goal:** LEAD and LAG functions

**Table:** employee\_payroll

**Query:** 1) Calculate the difference between the salary of the current row and the previous row. 2) Calculate the difference between the salary of current row and the following row.

## Output:

Result Grid						
		Filter Rows:		Export:		Wrap Cell Content:
	Employee_ID	Salary	Salary_prev	Salary_Next	Lag_Difference	LEAD_Difference
▶	120101	163040	0	108255	163040	54785
	120102	108255	163040	87975	-54785	20280
	120103	87975	108255	46230	-20280	41745
	120104	46230	87975	27110	-41745	19120
	120105	27110	46230	26960	-19120	150
	120106	26960	27110	30475	-150	-3515
	120107	30475	26960	27660	3515	2815
	120108	27660	30475	26495	-2815	1165
	120109	26495	27660	28615	-1165	-2120