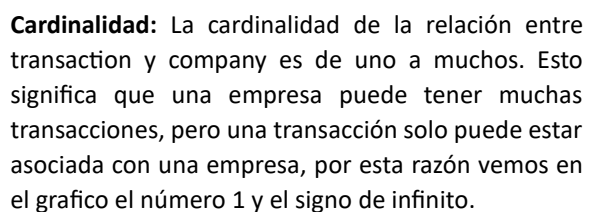


===== NIVEL 1 =====



**ORDER BY:** nos ayuda para ordenar por el nombre de la compañía, ya que los contenidos de búsqueda son textos, si fuera numérico se usaría ASC (ascendente) / DESC (descendente)

```

2  -- Ejercicio 2
3  -- Realiza la siguiente consulta: Debes obtener el nombre, email y país de cada compañía,
4  -- ordena los datos en función del nombre de las compañías.
5  • SELECT company_name, email, country
6    FROM transactions.company
7    ORDER BY company_name;
8

```

| company_name                       | email                             | country        |
|------------------------------------|-----------------------------------|----------------|
| A Institute                        | metus.aliquam@google.edu          | Belgium        |
| Ac Fermentum Incorporated          | donec.porttitor.tellus@yahoo.net  | Germany        |
| Ac Industries                      | ipsum@yahoo.com                   | Germany        |
| Ac Libero Inc.                     | mollis.lectus@protonmail.ca       | United Kingdom |
| Aliquam Erat Volutpat LLP          | pede.nunc@icloud.net              | Italy          |
| Aliquam Jaculis Lacus Corp.        | dictum@aol.org                    | Belgium        |
| Aliquam PC                         | scelerisque.mollis@icloud.org     | Germany        |
| Aliquet Diam Limited               | eu.eros.nam@icloud.org            | United States  |
| Aliquet Sem Limited                | sem.magna@yahoo.edu               | Netherlands    |
| Aliquet Vel Vulputate Incorporated | suspendisse.commodo@outlook.co.uk | Netherlands    |
| Amet Faucibus Ut Foundation        | malesuada@icloud.net              | United Kingdom |
| Amet Institute                     | nullam.lobortis.quam@outlook.net  | Australia      |
| Amet Lorem LLP                     | ultrices.adipiscing@icloud.edu    | Spain          |
| Amet Luctus Vulputate Foundation   | nulla@outlook.com                 | Canada         |
| Amet Nulla Donec Corporation       | mattis.integer.eu@protonmail.net  | Italy          |
| Ante Jaculis Nec Foundation        | sed.dictum.proin@outlook.ca       | New Zealand    |
| Arcu LLP                           | dui@aol.ca                        | Norway         |
| At Associates                      | tristique.neque@yahoo.co.uk       | New Zealand    |
| At Pedo Corp.                      | ac.mi.eleifend@hotmail.edu        | Italy          |
| Auctor Mauris Corp.                | eget.metus@protonmail.ca          | Germany        |
| Auctor Mauris Vel LLP              | nec.tempus@icloud.co.uk           | United States  |
| Augue Foundation                   | mauris@yahoo.com                  | Germany        |
| Convallis In Incorporated          | mauris.ut@aol.co.uk               | Germany        |
| Cras Consulting                    | sed.consequat@google.ca           | Belgium        |
| Cras Vehicula Aliquet Industries   | arcu@hotmail.org                  | Netherlands    |
| Dictum Eu Corp.                    | donec.vitae@icloud.ca             | Canada         |
| Dis Parturient Institute           | purus@protonmail.org              | Ireland        |
| Dolor Vitae Limited                | purus.maecenas@yahoo.edu          | France         |
| Donec Fringilla PC                 | ut.tincidunt@hotmail.ca           | France         |
| Donec Ltd                          | at.jaculis@hotmail.co.uk          | Norway         |
| Dui Cras Associates                | tristique@yahoo.com               | Italy          |
| Dui Quis Institute                 | luctus.sit.amet@yahoo.co.uk       | New Zealand    |

### -- Ejercicio 3

Desde la sección de marketing te solicitan que les pases un listado de los países que están realizando compras

```

SELECT DISTINCT company.country
FROM transactions.company
JOIN transactions.transaction ON transaction.company_id = company.id;
10  -- Ejercicio 3
11  -- Desde la sección de marketing te solicitan que les pases un listado de los países que están realizando compras
12  • SELECT DISTINCT company.country
13    FROM transactions.company
14    JOIN transactions.transaction ON transaction.company_id = company.id;
15
16

```

| country        |
|----------------|
| Germany        |
| Australia      |
| United States  |
| New Zealand    |
| Norway         |
| United Kingdom |
| Italy          |
| Belgium        |
| Sweden         |
| Ireland        |
| China          |
| Canada         |
| France         |
| Netherlands    |
| Spain          |

### SUGERENCIA:

En este caso el pedido hubiera sido interesante agregar una columna con los valores de compra por país

```

SELECT DISTINCT company.country, SUM(amount) AS total_venta
FROM transactions.company
JOIN transactions.transaction ON transaction.company_id = company.id
GROUP BY company.country;

```

| country        | total_venta |
|----------------|-------------|
| Germany        | 28815.98    |
| Australia      | 2784.63     |
| United States  | 5256.05     |
| New Zealand    | 2445.05     |
| Norway         | 17286.71    |
| United Kingdom | 27073.17    |
| Italy          | 3427.03     |
| Belgium        | 2965.92     |
| Sweden         | 20588.59    |
| Ireland        | 17193.12    |
| China          | 682.67      |
| Canada         | 16448.52    |
| France         | 1075.19     |
| Netherlands    | 4554.32     |
| Spain          | 106.80      |

#### -- Ejercicio 4

Desde marketing también quieren saber desde cuántos países se realizan las compras

```
SELECT COUNT(DISTINCT company.country) AS total_countries
FROM transactions.company
INNER JOIN transactions.transaction ON transaction.company_id = company.id
WHERE transaction.declined = 0;
```

```
22 -- Ejercicio 4
23 -- Desde marketing también quieren saber desde cuántos países se realizan las compras
24 • SELECT COUNT(DISTINCT company.country) AS total_countries
25 FROM transactions.company
26 INNER JOIN transactions.transaction ON transaction.company_id = company.id
27 WHERE transaction.declined = 0;
28
29
```

| total_countries |
|-----------------|
| 15              |

#### -- Ejercicio 5

Tu jefe identifica un error con la compañía que tiene vaya 'b-2354'.

Por tanto, te solicita que le indiques el país y nombre de compañía de este ve.

```
SELECT c.country, c.company_name
FROM transactions.company c
WHERE c.id = 'b-2354';
```

```
33 • SELECT c.country, c.company_name
34 FROM transactions.company c
35 WHERE c.id = 'b-2354';
36
```

| country        | company_name   |
|----------------|----------------|
| United Kingdom | Ac Libero Inc. |

#### -- Ejercicio 6

Además, ¿tu jefe te solicita que indiques cuál es la compañía con mayor gasto medio?

```
SELECT company_name, AVG(transaction.amount) AS average_spend
FROM transactions.company
INNER JOIN transactions.transaction ON transaction.company_id = company.id
GROUP BY company.id
ORDER BY average_spend DESC
LIMIT 1;
```

```
42 • SELECT company_name, AVG(transaction.amount) AS average_spend
43 FROM transactions.company
44 INNER JOIN transactions.transaction ON transaction.company_id = company.id
45 GROUP BY company.id
46 ORDER BY average_spend DESC
47 LIMIT 1;
```

| company_name   | average_spend |
|----------------|---------------|
| Eget Ipsum Ltd | 473.075000    |

## ===== NIVEL 2 =====

**-- Ejercicio 1**

**Tu jefe está redactando un informe de cierre del año y te solicita que le envíes información relevante para el documento.**

**Para ello te solicita verificar si en la base de datos existen compañías con identificadores (id) duplicados.**

```
SELECT company.id, COUNT(*) AS num_companies
FROM transactions.company
GROUP BY company.id
HAVING COUNT(*) > 1;
51 • SELECT company.id, COUNT(*) AS num_companies -- COUNT() para el conteo de las id y luego la asignación
52 FROM transactions.company
53 GROUP BY company.id
54 HAVING COUNT(*) > 1; -- filtro para indicar las compañías que se repiten mas de 1 vez
55 -- CONCLUSION: aparentemente no hay duplicados en la base de datos
56
57
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

| id | num_companies |
|----|---------------|
|----|---------------|

Aparentemente no tenemos resultados duplicados conforme la petición y búsqueda conforme el filtrado de `HAVING COUNT(*) > 1;`

**-- Ejercicio 2**

**¿En qué día se realizaron las cinco ventas más costosas? Muestra la fecha de la transacción y la sumatoria de la cantidad de dinero.**

```
SELECT DATE(timestamp) as fecha, SUM(amount) AS total_venta
FROM transactions.transaction
GROUP BY fecha
ORDER BY total_venta DESC -- ordenado por el total de venta en descenso
LIMIT 5;
63 • SELECT DATE(timestamp) as fecha, SUM(amount) AS total_venta
64 FROM transactions.transaction
65 GROUP BY fecha
66 ORDER BY total_venta DESC
67 LIMIT 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

| fecha      | total_venta |
|------------|-------------|
| 2021-03-29 | 1564.87     |
| 2021-12-20 | 1532.36     |
| 2021-06-15 | 1469.90     |
| 2021-05-09 | 1463.73     |
| 2021-06-21 | 1443.11     |

**-- Ejercicio 3**

**¿En qué día se realizaron las cinco ventas de menor valor? Muestra la fecha de la transacción y la sumatoria de la cantidad de dinero.**

```
SELECT DATE(timestamp) as fecha, SUM(amount) AS total_venta
FROM transactions.transaction
GROUP BY fecha
ORDER BY total_venta ASC -- ordenado por el total de venta en descenso
LIMIT 5;
72 • SELECT DATE(timestamp) as fecha, SUM(amount) AS total_venta
73 FROM transactions.transaction
74 GROUP BY fecha
75 ORDER BY total_venta ASC
76 LIMIT 5;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: | Fetch rows:

| fecha      | total_venta |
|------------|-------------|
| 2022-01-04 | 15.05       |
| 2021-04-27 | 18.08       |
| 2022-01-24 | 23.86       |
| 2022-02-27 | 30.76       |
| 2022-01-14 | 37.55       |

**-- Ejercicio 4**

**¿Cuál es la media de gasto por país? Presenta los resultados ordenados de mayor a menor medio.**

```
SELECT country, AVG(transaction.amount) AS average_amount
FROM transaction
INNER JOIN company ON transaction.company_id = company.id
GROUP BY company.country
ORDER BY average_amount DESC;
```

76 -- Ejercicio 4  
77 -- ¿Cuál es la media de gasto por país? Presenta los resultados  
78 • SELECT country, AVG(transaction.amount) AS average\_amount  
79 FROM transaction  
80 INNER JOIN company ON transaction.company\_id = company.id  
81 GROUP BY company.country  
82 ORDER BY average\_amount DESC;

83

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

| country        | average_amount |
|----------------|----------------|
| United States  | 309.179412     |
| Ireland        | 277.308387     |
| United Kingdom | 270.731700     |
| Canada         | 269.647869     |
| Sweden         | 260.615063     |
| Norway         | 254.216324     |
| Netherlands    | 253.017778     |
| Germany        | 244.203220     |
| Australia      | 232.052500     |
| Belgium        | 228.147692     |
| China          | 227.556667     |
| New Zealand    | 222.277273     |
| Italy          | 201.590000     |
| France         | 179.198333     |
| Spain          | 53.400000      |

-- ===== NIVEL 3 =====

**-- Ejercicio 1**

**Presenta el nombre, teléfono y país de las compañías, junto con la cantidad total gastada, de aquellas que realizaron transacciones con un gasto comprendido entre 100 y 200 euros. ordena los resultados de mayor a menor cantidad gastada.**

```
SELECT company_name, phone, country, t.amount AS cantidad_total
FROM transaction t
INNER JOIN company c ON t.company_id = c.id
WHERE t.amount BETWEEN 100 AND 200
ORDER BY cantidad_total DESC;
```

100 • SELECT company\_name, phone, country, t.amount AS cantidad\_total  
101 FROM transaction t  
102 INNER JOIN company c ON t.company\_id = c.id  
103 WHERE t.amount BETWEEN 100 AND 200  
104 ORDER BY cantidad\_total DESC;

<

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

| company_name                 | phone          | country        | cantidad_total |
|------------------------------|----------------|----------------|----------------|
| Lorem Eu Incorporated        | 01 83 66 62 07 | Canada         | 199.83         |
| Ut Sempser Foundation        | 01 60 36 33 06 | Sweden         | 199.81         |
| At Associates                | 09 56 61 10 65 | New Zealand    | 199.71         |
| Amet Nulla Donec Corporation | 07 15 25 14 74 | Italy          | 197.65         |
| Non Institute                | 06 77 15 31 14 | United Kingdom | 196.71         |

**-- Ejercicio 2**

**Indica el nombre de las compañías que realizaron compras el 16 de marzo de 2022, 28 de febrero de 2022 y 13 de febrero de 2022.**

```
SELECT DISTINCT company.company_name, transaction.timestamp
FROM transaction
INNER JOIN company ON transaction.company_id = company.id
WHERE date(timestamp) IN ('2022-03-16', '2022-02-28', '2022-02-13')
GROUP BY company_name, transaction.timestamp;
```

```
98 -- Ejercicio 2
99 -- Indica el nombre de las compañías que realizaron compras el 16 de marzo de 2022,
100 -- 28 de febrero de 2022 y 13 de febrero de 2022.
101 • SELECT DISTINCT company.company_name, transaction.timestamp
102 FROM transaction
103 INNER JOIN company ON transaction.company_id = company.id
104 WHERE date (timestamp) IN ('2022-03-16', '2022-02-28', '2022-02-13')
105 GROUP BY company_name, transaction.timestamp;
106
```

| Result Grid |                    | Filter Rows:        | Export: | Wrap Cell Content: <a href="#">IA</a> |
|-------------|--------------------|---------------------|---------|---------------------------------------|
|             | company_name       | timestamp           |         |                                       |
| ▶           | Sed LLC            | 2022-02-13 16:33:50 |         |                                       |
|             | Arcu LLP           | 2022-02-13 12:02:43 |         |                                       |
|             | Nunc Interdum I... | 2022-02-13 04:07:29 |         |                                       |
|             | Nunc Interdum I... | 2022-02-28 05:55:03 |         |                                       |
|             | Ut Semper Foun...  | 2022-02-28 00:10:50 |         |                                       |
|             | Lorem Eu Incorp... | 2022-03-16 14:01:36 |         |                                       |
|             | Malesuada PC       | 2022-02-13 15:13:38 |         |                                       |
|             | Malesuada PC       | 2022-02-28 08:09:21 |         |                                       |
|             | Malesuada PC       | 2022-03-16 02:35:05 |         |                                       |