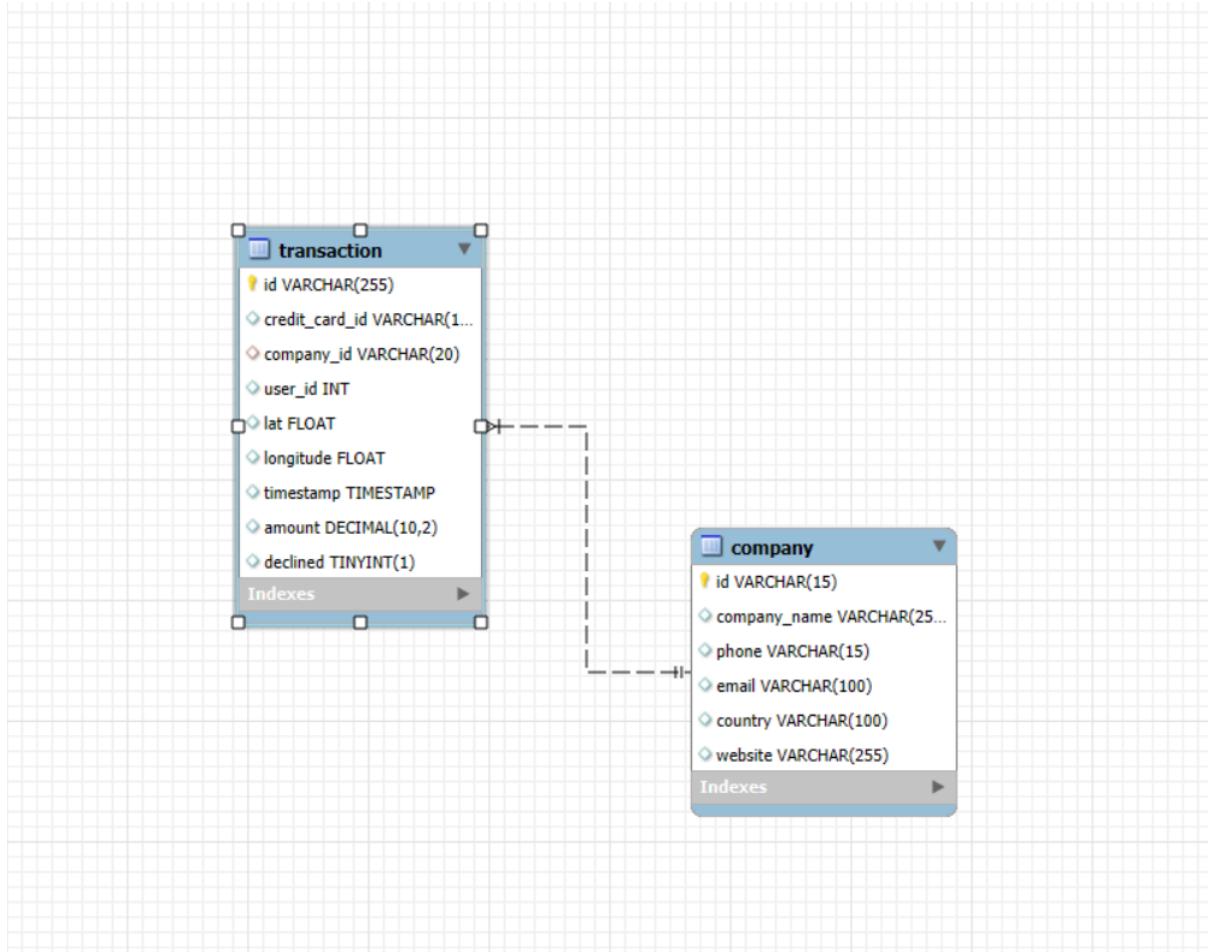


Este esquema se compone por 2 tablas, Company que contiene la información de las empresas(clientes) Con el nombre, teléfono, email, país, y página web y un Id que es la primary key, en la segunda tabla Transaction, que son las transacciones, hay las siguientes columnas, hay un Id,que es el Id de la transacción, un credit_card_id, user_id, company_id que sería correspondiente al Id de la tabla Company y a través de la cual están relacionadas, posteriormente tenemos lat y longitude que son las coordenadas, timestamp que es el dato que nos proporciona fecha y hora de la transacción, amount que nos indica el monto de la transacción, y decline que es un dato booleano que nos indica si la transacción se realizó con éxito o no.



Ejercicio 2.1- Listado de los países que están realizando compras.

The screenshot shows the MySQL Workbench interface with a SQL editor window titled "SQL File 5" containing the following query:

```
1 /*NIE2*/
2
3 • SELECT country, COUNT(country) AS cuantos
4   FROM company c
5   JOIN transaction t ON t.company_id=c.id
6   GROUP BY c.country
7   Order by cuantos;
8 /*
```

The results grid displays the following data:

country	cuantos
Spain	2
China	3
France	6
New Zealand	11
Australia	12
Belgium	13
United States	17
Italy	17
Netherlands	18
Canada	61
Ireland	62
Norway	68
Sweden	79
United Kingdom	100
Germany	118

Below the results, the message bar indicates: "1 10:36:19 SELECT country, COUNT(country) AS cuantos FROM company c JOIN transaction t ON t.company_id=c.id G... 15 rows(s) returned". The status bar at the bottom right shows the date and time: "10:36 a.m. 14/01/2025".

Ejercicio 2.2 Desde cuántos países se realizan las compras.

The screenshot shows the MySQL Workbench interface with a SQL editor window titled "SQL File 5" containing the following query:

```
8
9 • SELECT COUNT(DISTINCT c.country) AS total_countries
10  FROM company c
11  JOIN transaction t ON t.company_id = c.id;
12 /*
```

The results grid displays the following data:

total_countries
15

Below the results, the message bar indicates: "1 10:36:19 SELECT country, COUNT(country) AS cuantos FROM company c JOIN transaction t ON t.company_id=c.id G... 15 rows(s) returned". The status bar at the bottom right shows the date and time: "12:00 p.m. 14/01/2025".

Ejercicio 2.3 Identifica a la compañía con la mayor media de ventas.

```

MySQL Workbench - Principal
File Edit View Query Database Server Tools Scripting Help
Navigator Schemas Administration Schemas Information
Columns
    id
    credit_card_id
    company_id
    user_id
    lat
    longitude
    timestamp
    amount
    declined
Indexes
Foreign Keys
Administration Schemas
Information
Column: id
Collation: utf8mb4_0900_ai_ci
Definition:
    id varchar(255) PK

```

SQL File 5* Sprint1E* >

```

13 • SELECT c.company_name, AVG(t.amount) AS media_ventas
14   FROM company c
15   JOIN transaction t ON t.company_id=c.id
16   GROUP BY c.company_name
17   ORDER BY media_ventas DESC
18   LIMIT 1;

```

Result Grid | Filter Rows: Export: Wrap Cell Content: 15
company_name media_ventas
Eget ipsum Ltd 473.07500

SQLAdditions | Jump to

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result 4 > Read Only Context Help Snippets

Action Output | Duration / Fetch: 0.016 sec / 0.000 sec
Time Action Message
3 12:01:49 SELECT c.company_name, AVG(t.amount) AS media_ventas FROM company c JOIN transaction t ON t.co... 100 rows(s) returned

Object Info Session 12:07 p.m. 14/01/2025

Ejercicio 3.1 Muestra todas las transacciones realizadas por empresas de Alemania.

```

MySQL Workbench - Principal
File Edit View Query Database Server Tools Scripting Help
Navigator Schemas Administration Schemas Information
schemas
sys
transactions
    tables
    company
    transaction
    views
    stored procedures
    functions
world
Information
No object selected

```

SQL File 3* e3.3* >

```

21
22 • SELECT t.id, t.timestamp, t.amount, c.country
23   FROM company c, transaction t
24   WHERE c.country = 'Germany' and c.id=t.company_id
25 ;

```

Result Grid | Filter Rows: Export: Wrap Cell Content: 15
id timestamp amount country
10881D-5B23-A76C-55EF-C568E49A05D0 2021-07-07 17:43:16 293.57 Germany
EA2C3281-C9C1-A387-44F9-729FB4851C76 2021-05-09 10:25:08 119.36 Germany
0DD2E608-5C9E-01B3-4999-43AD0735A 2021-04-17 05:30:17 252.47 Germany
AB069F53-965E-A2A8-CED6-CABC4FD92501 2021-04-15 13:37:18 60.99 Germany
0466A42E-47CF-8D24-F01C-0B689713128 2021-07-26 07:29:18 49.53 Germany
0A476ED9-0C13-1962-F878-D3563924B539 2022-02-26 20:33:54 430.49 Germany
122DC330-E19F-0632-CDD8-C54CF1EB894 2021-06-09 06:04:14 172.01 Germany
135267BA-DE7D-957C-C42C-6450A23B54 2021-12-29 20:38:23 17.97 Germany
14CAE5B5-8FB1-3E4A-C85-EA16753F4 2021-12-31 00:29:42 388.04 Germany
158A3ACD-541C-0BBC-65BD-6373C670F1C 2022-03-08 05:02:19 240.29 Germany
162C7C78-2B6B-7971-AE4-D212E732451 2021-04-11 05:59:18 231.26 Germany
1717F068-ADAD-7082-A748-9112BE892CCC 2021-12-29 16:18:54 249.91 Germany
1753A288-9FC1-526-S3C9-AFFB97B03A 2021-08-17 05:32:08 497.84 Germany
186F53DE-DE27-B1FE-882F-18861CEB726 2021-12-20 13:13:45 238.16 Germany
18C4E2D0-1E4C-F35E-2198-6660BD1DC25 2021-09-24 18:55:25 237.04 Germany

Result 1 > Read Only Context Help Snippets

Action Output | Duration / Fetch: 0.000 sec / 0.000 sec
Time Action Message
5 11:29:12 INSERT INTO company (id, company_name, phone, email, country, website) VALUES ('b-9999', 'inven...', 1 row(s) affected)
6 11:29:12 SELECT company_name AS para_eliminar, id FROM company c WHERE NOT EXISTS (SELECT * ... 2 row(s) returned)
7 11:29:12 SELECT company_name AS para_eliminar, id AS id_sint FROM company c WHERE c.id NOT IN (SELECT ... 2 row(s) returned)
8 11:29:12 DELETE FROM company c WHERE c.id NOT IN (SELECT c.company_id FROM transaction t ... 2 row(s) affected)
9 11:32:34 SELECT t.id, t.timestamp, t.amount, c.country FROM company c, transaction t WHERE c.country = 'Gema...' 118 row(s) returned

Object Info Session 11:32 a.m. 15/01/2025

Ejercicio 3.2 Lista las empresas que han realizado transacciones por un amount superior a la media de todas las transacciones.

```

MySQL Workbench
Principal x
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
Columns
id
credit_card_id
company_id
user_id
lat
longitude
timestamp
amount
created
Foreign Keys
Administration Schemas
Information
Column: id
Collation: utf8mb4_0900_ai_ci
Definition:
id varchar(255) PK
Result Grid | Filter Rows: | Export: | Wrap Cell Content: |
company_name
Magna A Neque Industries
Fusce Corp.
Vestibulum Lorem PC
Gravida Sagittis LLP
Elt Etiam Lororet Associates
Non Magna LLC
Magna Incorporated
Pringilla Portitor Incorporated
Ut Semper Foundation
Ac Industries
Loren Ipsum Incorporated
Mauris Institute
Neque Telus Incorporated
Leaque Quisque Associates
Tortor In Non Commodo Cras
company 7 x
Output
Action Output
# Time Action
6 12:08:55 SELECT `id` t.timestamp, t.amount, c.country FROM company c, transaction t WHERE c.country = 'Germany' 4696 row(s) returned
Duration / Fetch
0.000 sec / 0.000 sec
Object Info Session
10°C Soleado
Buscar
Read Only Context Help Snippets
12:12 p.m. 14/01/2025

```

Ejercicio 3.3 Eliminarán del sistema las empresas que carecen de transacciones registradas, entrega el listado de estas empresas.

```

MySQL Workbench
Principal x
File Edit View Query Database Server Tools Scripting Help
Navigator
SCHEMAS
Filter objects
Tables
sakila
sys
transactions
company
transaction
Views
Stored Procedures
Functions
Schema: transactions
Administration Schemas
Information
Result Grid | Filter Rows: | Export: | Wrap Cell Content: |
para_eliminar id_sint
company 3 x
Output
Action Output
# Time Action
21 11:46:44 SELECT company_name AS para_eliminar, id AS id_sint FROM company c WHERE c.id NOT IN (SELECT t.company_id
FROM transaction t
);
Duration / Fetch
0.000 sec / 0.000 sec
Object Info Session
8°
Buscar
Read Only Context Help Snippets
11:47 a.m. 15/01/2025

```

Ejercicio 1

Identifica los cinco días que se generó la mayor cantidad de ingresos en la empresa por ventas. Muestra la fecha de cada transacción junto con el total de las ventas.

The screenshot shows the MySQL Workbench interface with a query editor and results grid. The query retrieves the top 5 days with the highest total sales from the transaction table, ordered by total sales in descending order. The results show dates from March 29, 2021, to June 21, 2021, with their respective total sales values.

```
1 /L2E1/
2
3 • SELECT DATE(timestamp), SUM(amount) AS total_dia
4 FROM transaction
5 GROUP BY DATE(timestamp)
6 ORDER BY total_dia DESC
7 LIMIT 5;
8
```

DATE(timestamp)	total_dia
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 2

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

The screenshot shows the MySQL Workbench interface with a query editor and results grid. The query calculates the average sales per country and orders the results from highest average to lowest. The results list various countries along with their average sales figures.

```
9 /L2E2/
10 • SELECT country, AVG(amount) AS media_ventas
11   FROM company c
12   JOIN transaction t ON t.company_id=c.id
13   GROUP BY country
14   ORDER BY media_ventas DESC
15 ;
16
```

country	media_ventas
United States	306.179412
Ireland	277.308387
United Kingdom	270.731700
Canada	269.6474869
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

Ejercicio 3

En tu empresa, se plantea un nuevo proyecto para lanzar algunas campañas publicitarias para hacer competencia a la compañía “Non Institute”. Para ello, te piden la lista de todas las transacciones realizadas por empresas que están ubicadas en el mismo país que esta compañía.

- Muestra el listado aplicando JOIN y subconsultas.
- Muestra el listado aplicando solo subconsultas.

The screenshot shows the MySQL Workbench interface. In the top-left, the Navigator pane displays the 'transaction' schema with its columns: id, credit_card_id, company_id, user_id, lat, longitude, timestamp, and amount. The main area contains two SQL queries:

```
17 /*L2E3*/
18 • SELECT t.id, c.company_name
19   FROM company c
20  JOIN transaction t ON t.company_id=c.id
21 WHERE c.country= 'United Kingdom'
22 ;
23 • SELECT t.id, c.company_name
24   FROM company c, transaction t
25 WHERE c.country= 'United Kingdom' AND t.company_id=c.id
26 ;
```

The 'Result Grid' below shows the results of the first query, listing 25 rows of transaction IDs and company names. The results are as follows:

id	company_name
2B92E1C-EC14-A760-0A75-871477649D6A	Sed Nunc Ltd
ACD2011A-A2B1-C365-41E1-2AB00C65147A	Sed Nunc Ltd
433494E-CED-3068-AD4-FEB718A1ACE	Non Magna LLC
BC2B9A38-7B84-28CD-1F88-14DE0863E773	Non Magna LLC
147983D-878A-C789-4CE3-807C2DE85AB8	Emim Condimentum Ltd
152598C-2D9D-0684-866-91EDF393E8FF	Emim Condimentum Ltd
1B36858-A2E9-E769-D9C9-C545350AFD38	Emim Condimentum Ltd
204180E5-B804-BE98-BD7A-A95C1BFDBF5C	Emim Condimentum Ltd
23988576-6C0E-137A-C2F6-3180A188A2D3	Emim Condimentum Ltd
267C4A86-7B47-1C5E-0718-2824983C87D0	Emim Condimentum Ltd
3142C93E-B3B7-46E4-EE2D-29CA834619BD	Emim Condimentum Ltd
357868BE-7B1D-B887-3B7C-2088673AA31E	Emim Condimentum Ltd
360C7814-F7AF-B43A-0946-AB38D2683C86	Emim Condimentum Ltd
391E17E9-6E53-445A-A770-E8D977A1B89	Emim Condimentum Ltd

The 'Output' pane at the bottom shows the message: "55 13:25:49 SELECT t.id, c.company_name FROM company c JOIN transaction t ON t.company_id=c.id WHERE c.c... 100 row(s) returned".

Ejercicio 1

Presenta el nombre, teléfono, país, fecha y amount, de aquellas empresas que realizaron transacciones con un valor comprendido entre 100 y 200 euros y en alguna de estas fechas: 29 de abril de 2021, 20 de julio de 2021 y 13 de marzo de 2022. Ordena los resultados de mayor a menor cantidad.

The screenshot shows the MySQL Workbench interface with a query editor window titled "Spring2L3". The SQL code is:

```
1 /*L3E1*/
2 • SELECT c.company_name, c.phone, c.country, DATE(t.timestamp), t.amount
3   FROM company c
4     JOIN transaction t ON t.company_id=c.id
5   WHERE t.amount BETWEEN 100 AND 200
6   AND (DATE(t.timestamp) IN ('2021-04-29', '2021-07-20', '2022-03-13'))
7   ORDER BY DATE(t.timestamp)
```

The results grid displays the following data:

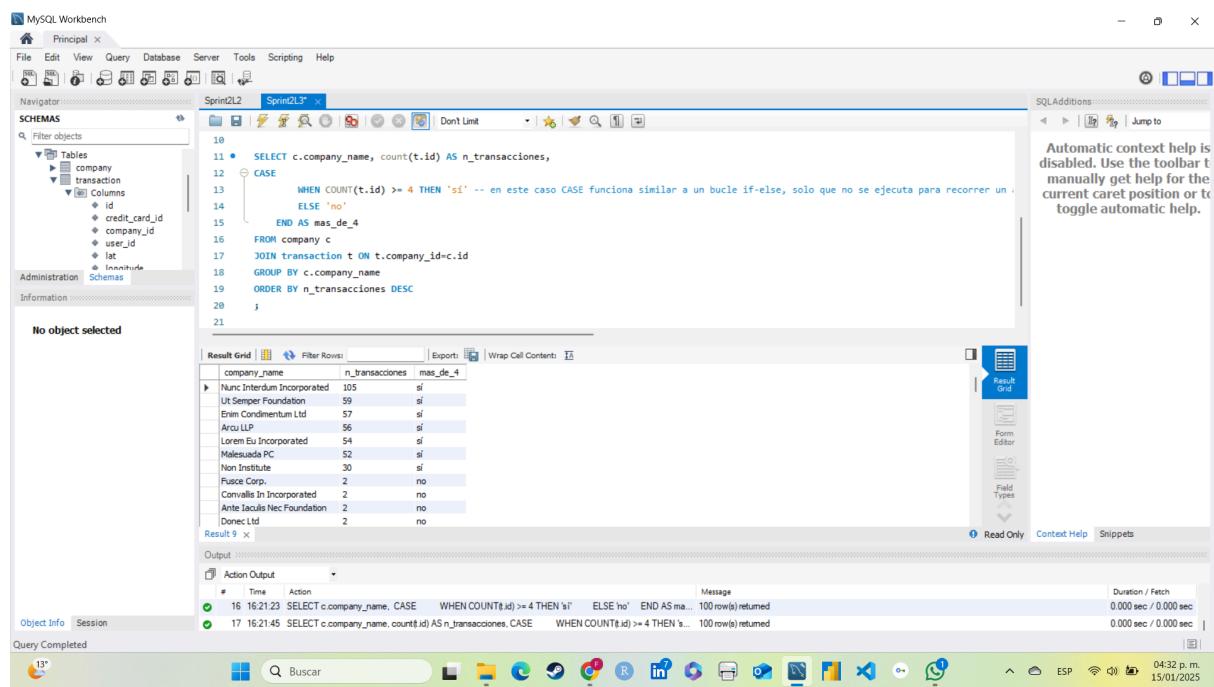
company_name	phone	country	DATE(t.timestamp)	amount
Ernesto Intendum Ltd	09 55 51 66 25	United Kingdom	2021-04-29	149.89
Nunc Intendum Incorporated	05 18 15 48 13	Germany	2021-04-29	111.51
Loren Eu Incorporated	01 63 66 61 07	Canada	2021-07-20	133.39
Intendum Feugiat Sed Associates	04 88 40 32 52	United Kingdom	2021-07-20	164.86
Nunc Intendum Incorporated	05 18 15 48 13	Germany	2022-03-13	164.32

The output pane shows the following log entries:

Action	Time	Message	Duration / Fetch
17 16:21:45	SELECT c.company_name, count(t.id) AS n_transacciones, CASE WHEN COUNT(t.id) >= 4 THEN 's...' ELSE 'n...' END AS status	100 row(s) returned	0.000 sec / 0.000 sec
18 16:33:47	SELECT c.company_name, c.phone, c.country, DATE(t.timestamp), t.amount FROM company c JOIN transaction t ON t.company_id=c.id WHERE t.amount BETWEEN 100 AND 200 AND (DATE(t.timestamp) IN ('2021-04-29', '2021-07-20', '2022-03-13')) ORDER BY DATE(t.timestamp)	5 row(s) returned	0.000 sec / 0.000 sec

Ejercicio 2

Necesitamos optimizar la asignación de los recursos y dependerá de la capacidad operativa que se requiera, por lo que te piden la información sobre la cantidad de transacciones que realizan las empresas, pero el departamento de recursos humanos es exigente y quiere un listado de las empresas donde especifiques si tienen más de 4 o menos transacciones.



The screenshot shows the MySQL Workbench interface. In the top-left, the Navigator pane displays the schema structure, including tables like 'company' and 'transaction'. The main area contains a SQL editor window titled 'Sprint2L2' with the following query:

```
10 • SELECT c.company_name, count(t.id) AS n_transacciones,
11   CASE
12     WHEN COUNT(t.id) >= 4 THEN 'sí' -- en este caso CASE funciona similar a un bucle if-else, solo que no se ejecuta para recorrer un
13     ELSE 'no'
14   END AS mas_de_4
15   FROM company c
16   JOIN transaction t ON t.company_id=c.id
17   GROUP BY c.company_name
18   ORDER BY n_transacciones DESC
19
20 ;
21
```

The 'Result Grid' tab is selected, showing the results of the query:

company_name	n_transacciones	mas_de_4
Nunc Interdum Incorporated	105	sí
Ullamcorper Foundation	59	sí
Erin Condiment Ltd	37	sí
Arcu LLP	66	sí
Lorem Eu Incorporated	54	sí
Malesuada PC	52	sí
Non Institute	30	sí
Fusce Corp.	2	no
Convallis In Incorporated	2	no
Ante Iaculis Nec Foundation	2	no
Donec Ltd	2	no

The 'Output' tab at the bottom shows the execution log:

#	Time	Action	Message	Duration / Fetch
16	16.21.23	SELECT c.company_name, CASE WHEN COUNT(t.id)>= 4 THEN 'sí' ELSE 'no' END AS mas_de_4 FROM company c JOIN transaction t ON t.company_id=c.id GROUP BY c.company_name ORDER BY n_transacciones DESC;	100 row(s) returned	0.000 sec / 0.000 sec
17	16.21.45	SELECT c.company_name, count(t.id) AS n_transacciones, CASE WHEN COUNT(t.id)>= 4 THEN 's...' 100 row(s) returned		0.000 sec / 0.000 sec