

Roser Blasco
Sprint 3
Data
Corregit per XXX

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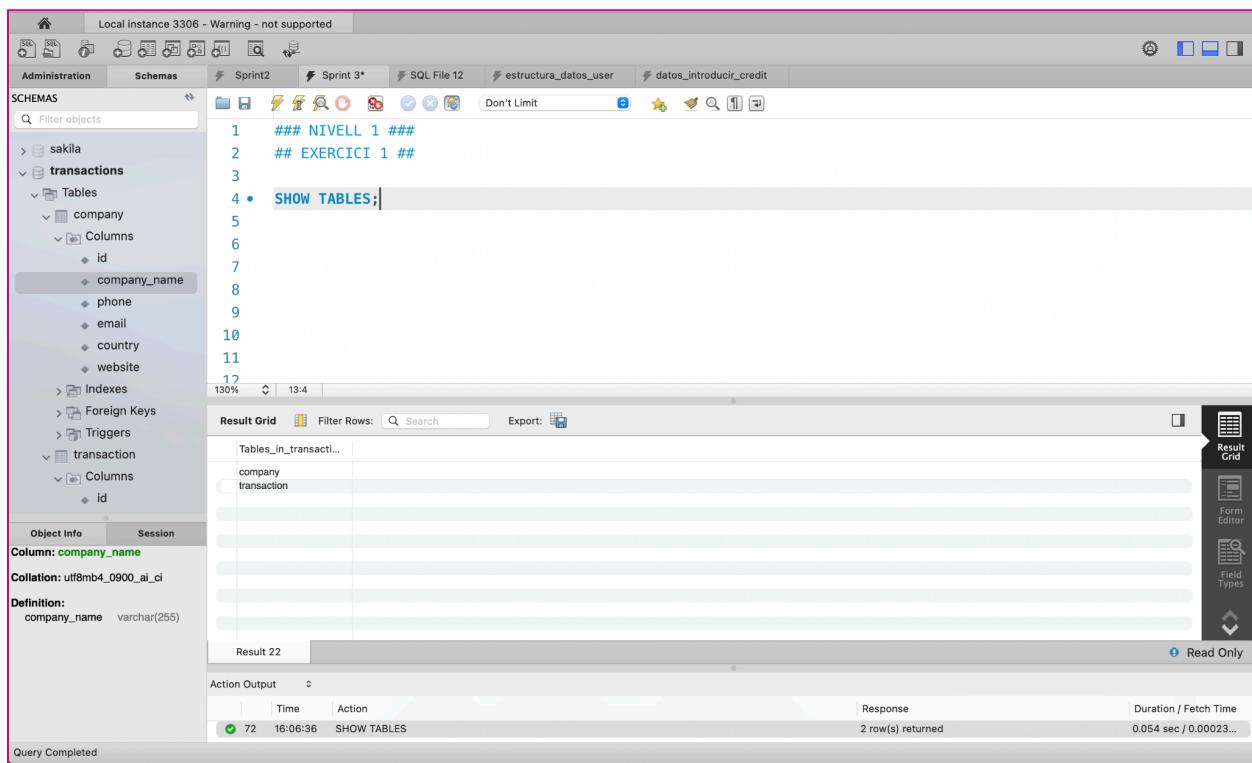
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Nivell 1

- Exercici 1: taula credit_card

La teva tasca és dissenyar i crear una taula anomenada "credit_card" que emmagatzemi detalls crucials sobre les targetes de crèdit. La nova taula ha de ser capaç d'identificar de manera única cada targeta i establir una relació adequada amb les altres dues taules ("transaction" i "company"). Després de crear la taula serà necessari que ingressis la informació del document denominat "dades_introduir_credit". Recorda mostrar el diagrama i realitzar una breu descripció d'aquest.

Comencem verificant que només tenim dues taules

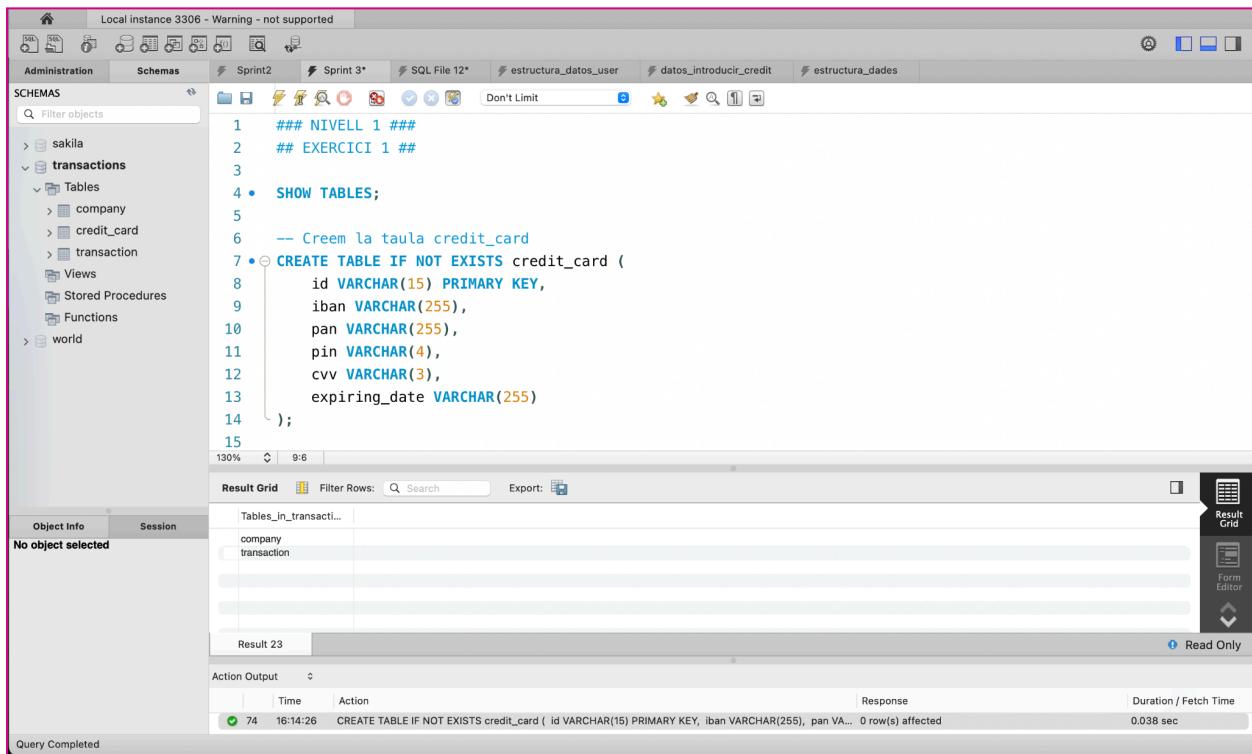


The screenshot shows the MySQL Workbench interface with the following details:

- Left Panel (Object Navigator):** Shows the database schema for the 'transactions' schema. It lists tables like 'company', 'transaction', and 'Tables_in_transaction'. Under 'company', columns 'id', 'company_name', 'phone', 'email', 'country', and 'website' are visible.
- Central Panel (Query Editor):** A SQL editor window with the following content:

```
1  ### NIVELL 1 ###
2  ## EXERCICI 1 ##
3
4 • SHOW TABLES;
```
- Result Grid:** A table titled 'Tables_in_transaction...' showing two rows: 'company' and 'transaction'.
- Bottom Status Bar:** Shows the query was completed successfully with a duration of 0.054 sec / 0.00023...

Afegim la taula, refresquem es schemas i els veiem a l'esquerra.
He elegit VARCHAR per a totes les variables



The screenshot shows the MySQL Workbench interface. In the top navigation bar, the schema is set to 'transactions'. The left sidebar shows the 'schemas' tree with 'sakila' and 'transactions' expanded, and 'Tables' selected under 'transactions'. The main pane displays the following SQL code:

```
1  ### NIVELL 1 ###
2  ## EXERCICI 1 ##
3
4 • SHOW TABLES;
5
6  -- Creem la taula credit_card
7 • CREATE TABLE IF NOT EXISTS credit_card (
8     id VARCHAR(15) PRIMARY KEY,
9     iban VARCHAR(255),
10    pan VARCHAR(255),
11    pin VARCHAR(4),
12    cvv VARCHAR(3),
13    expiring_date VARCHAR(255)
14 );
15
```

The 'Result Grid' panel below shows the results of the 'SHOW TABLES' command:

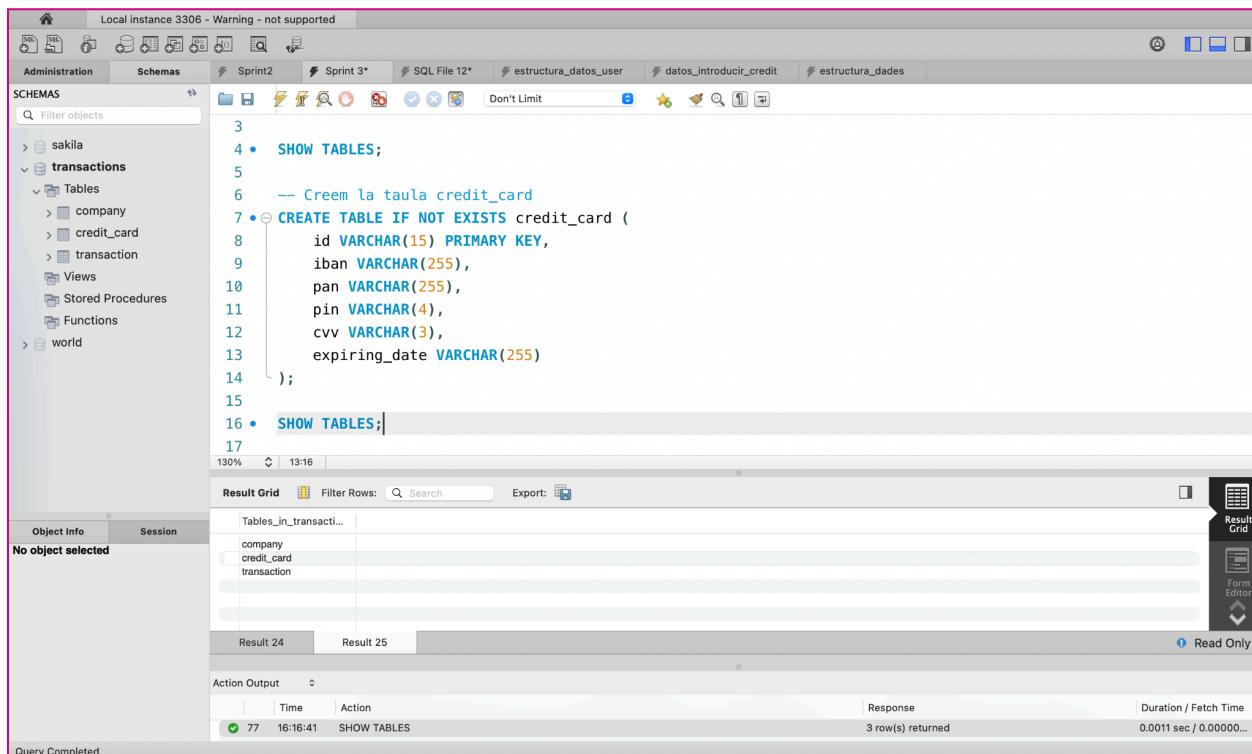
Tables_in_transactions
company
transaction

The 'Action Output' panel shows the log entry for the table creation:

Time	Action	Response	Duration / Fetch Time
16:14:26	CREATE TABLE IF NOT EXISTS credit_card (id VARCHAR(15) PRIMARY KEY, iban VARCHAR(255), pan VA... 0 row(s) affected		0.038 sec

At the bottom, the status bar says 'Query Completed'.

També li tornem a preguntar per les taules que hi ha ara



The screenshot shows the MySQL Workbench interface with the schema set to 'transactions'. The left sidebar shows the 'schemas' tree with 'sakila' and 'transactions' expanded, and 'Tables' selected under 'transactions'. The main pane displays the following SQL code:

```
3
4 • SHOW TABLES;
5
6  -- Creem la taula credit_card
7 • CREATE TABLE IF NOT EXISTS credit_card (
8     id VARCHAR(15) PRIMARY KEY,
9     iban VARCHAR(255),
10    pan VARCHAR(255),
11    pin VARCHAR(4),
12    cvv VARCHAR(3),
13    expiring_date VARCHAR(255)
14 );
15
16 • SHOW TABLES;|
```

The 'Result Grid' panel shows the results of the 'SHOW TABLES' command:

Tables_in_transactions
company
credit_card
transaction

The 'Action Output' panel shows the log entry for the 'SHOW TABLES' command:

Time	Action	Response	Duration / Fetch Time
16:16:41	SHOW TABLES	3 row(s) returned	0.0011 sec / 0.00000...

At the bottom, the status bar says 'Query Completed'.

Ara carregarem les dades de "dades_introduir_credit"

Que té unes 275 files

Li donem un ull a la taula, que tingui aquest número d'entrades

Local instance 3306 - Warning - not supported MySQL Model* EER Diagram

Administration Schemas Sprint2 Sprint 3* datos_introducir_credit estructura_dades SQL File 16*

SCHEMAS
Q Filter objects
> sakila
+ transactions
Tables
> company
> credit_card
> transaction
Views
Stored Procedures
Functions
> world

1 • SELECT *
2 FROM credit_card;

100% 18:2

Result Grid Filter Rows Search Edit Export/Import

	id	iban	pan	pin	cvv	expiring_date
Ccu-2945	D026854763748537475216568689	5142423821948828	9080	887	08/24/23	
Ccu-2952	BG45VQL52710525690255	4556 453 55 5287	4598	438	06/29/21	
Ccu-2959	CR724277244335841535	372461377349975	3583	667	02/24/23	
Ccu-2966	BG72LKTQ1562762837363	44856867477265	4900	130	10/29/24	
Ccu-2973	P7870622814029456346	544 58654 54343 384	8760	887	01/30/25	
Ccu-2980	DE392418818806277136	402400 714584596	5075	598	07/24/22	
Ccu-2987	GE8968143483774871813	3763 747687 76666	2298	797	10/31/23	
Ccu-2994	BH827144283606765294	344283273252593	7545	595	02/28/22	
Ccu-3001	CY49087426654774581266832110	511722 924833 2244	9562	867	09/16/22	
Ccu-3008	LUS07216693616119230	4485744464433884	1856	740	04/05/25	
Ccu-3015	PS11939821629571596864245821	3784 662233 17388	3246	822	01/31/22	
Ccu-3022	GTH695162850556977423121857	5164 1379 4842 3951	5610	342	04/25/25	
Ccu-3029	AZ62317413982441418123739748	3429 279566 77631	9708	503	09/02/23	
Ccu-3036	AZ93360102205824865843941994	3768 451556 48766	2232	565	10/27/25	
Ccu-3043	TN6481843310514852179535	455676 6437463635	5969	196	06/07/25	
Ccu-3050	FR5167744369175386831854477	4024007127322	4834	126	10/09/23	
Ccu-3057	LUS91822574697545215	3484 621767 21237	6805	846	09/14/25	
Ccu-3064	PS1469655454925337762727133	3467 732741 26810	3865	498	06/03/25	
Ccu-3071	NO8923814763512	3464 789562 23352	6625	661	12/20/23	
Ccu-3078	IS025127145884623279548733	4539 322 74 2377	9405	721	03/08/23	
Ccu-3085	BE63114723972437	5266 3346 1135 1687	7241	413	05/10/23	
Ccu-3092	RO65LSD016612125447487	3488 754223 46253	9417	594	12/19/22	
Ccu-3099	PT2610527535682307537218	448 55419 866837 5612	564	01/22/23		
Ccu-3106	AT68425163775116592	349547146395283	9733	209	01/27/24	
Ccu-3113	I26LGCT74732173572752	341834822877471	9011	287	06/12/21	
Ccu-3120	BS76617866681669397144	597648 522275 65777	7658	365	01/16/21	

credit_card 1

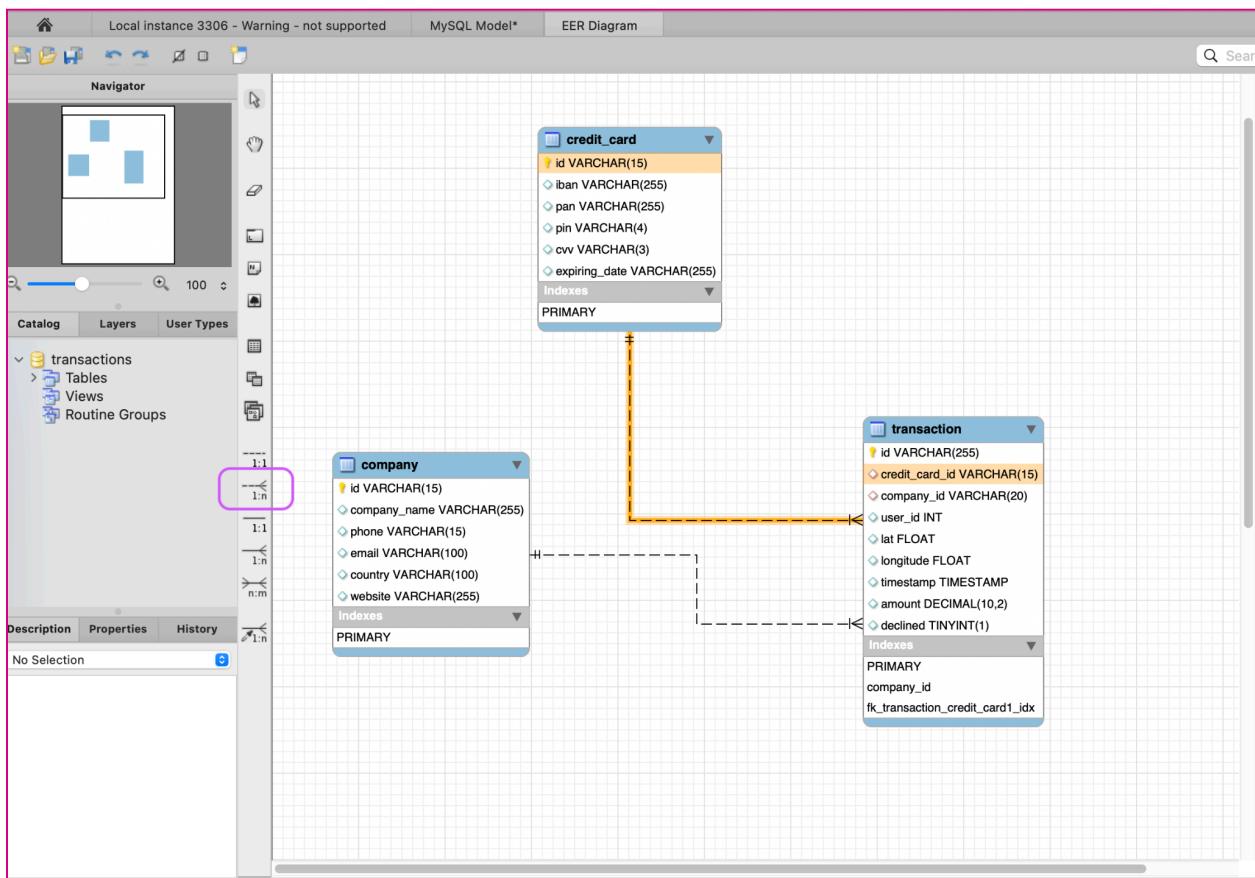
Action Output Time Action Response Duration / Fetch Time

353 16:28:20	SELECT * FROM credit_card	275 row(s) returned	0.0014 sec / 0.0009...
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Query Completed

[Comencen passos intermitjós a obviar]

Ara faltarà la relació, la posarem a mà en el diagrama clicant 1:n, per a que la primary key de credit_card puga relacionar-se amb moltes credit_card_id de transaction, ja que una targeta es pot fer servir en varies transaccions.



La relació amb company és indirecta a través de la taula transaction

[Retornem des del N3E1, ens comentem que hem de fer la relació amb el codi a més, els canvis que havíem fet en el diagrama no es van guardar.]

Intentem agefir la relació amb el codi

The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'credit_card' table is selected. The main area displays the following SQL code:

```
1
2 • alter table transaction add constraint fk_credit_card_id foreign key (credit_card_id)
3     references credit_card (id) on delete cascade on update cascade;
```

The status bar at the bottom right indicates: 'Query interrupted'. The Action Output panel shows the error message: '32 15:56:55 alter table transaction add constraint fk_credit_card_id foreign key (credit_card_id) references credit_card (id) on delete cascade on update cascade; Error Code: 1452. Cannot add or update a child row: a... 0.039 sec'.

Ara això ens dóna el mateix error, que tenim en l'exercici N1E3. Entem perquè hi ha aquella fila que no està relacionada. Anem a solucionar aquesta dependència en l'exercici 3 i tornem aquí.

[Ababen passos intermitjos a obviar]

Ara doncs, intentem afegir la relació amb codi

The screenshot shows the MySQL Workbench interface with the following details:

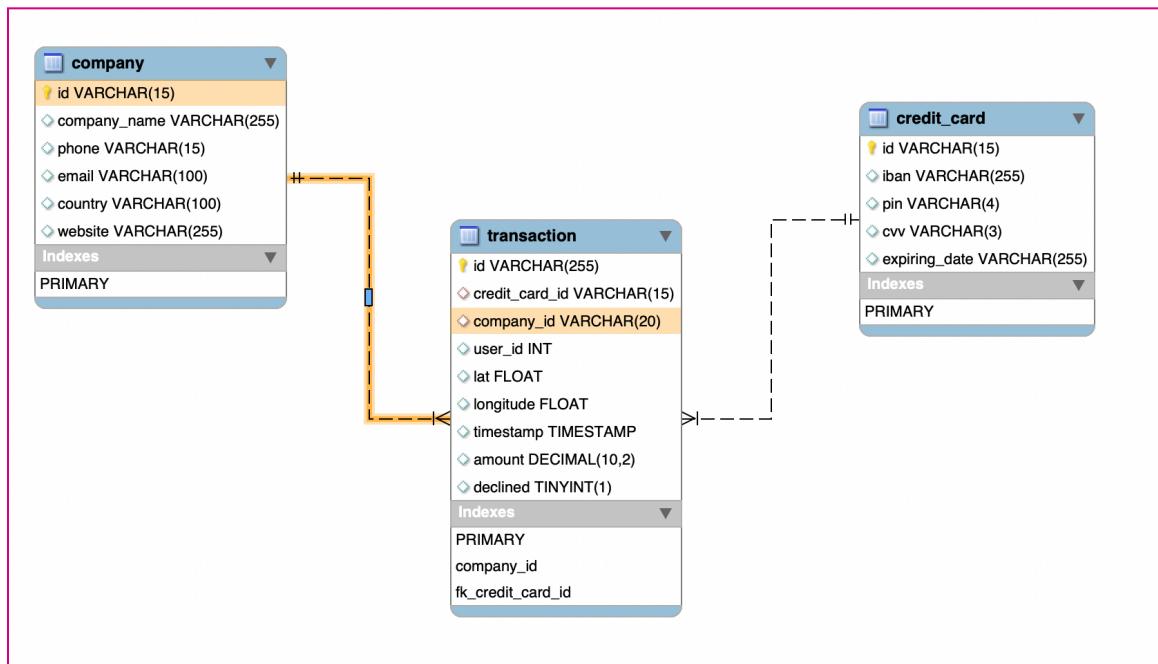
- Toolbar:** Administration, Schemas, Sprint 3, SQL File 17*, aniacambodi.
- Schemas:** sakila, transactions (selected), company, credit_card, transaction, vistamarketing, Stored Procedures, Functions, world.
- Query Editor:** Contains the following SQL code:

```
1
2 • alter table transaction add constraint fk_credit_card_id foreign key (credit_card_id)
3 references credit_card (id) on delete cascade on update cascade;
```
- Object Info:** Shows the **Table: credit_card** with the following columns:

Column	Type
id	varchar(15) PK
iban	varchar(265)
pin	varchar(4)
cvv	varchar(3)
expiring_date	varchar(255)
- Action Output:** Shows the result of the query execution:

Time	Action	Response	Duration / Fetch Time
37	10:49:40	alter table transaction add constraint fk_credit_card_id foreign key (credit_card_i... 586 row(s) affected Records: 586 Duplicates: 0 War...	0.056 sec
- Status:** Query Completed.

I comprovem que la relació està bé consultant el diagrama



- Exercici 2: canvi registre

El departament de Recursos Humans ha identificat un error en el número de compte de l'usuari amb ID CcU-2938. La informació que ha de mostrar-se per a aquest registre és: R323456312213576817699999. Recorda mostrar que el canvi es va realitzar.

Busquem aquesta entrada en la taula 'credit_card'

The screenshot shows the MySQL Workbench interface with a query editor and a results grid. The query is:

```
1 •  SELECT *
2   from credit_card
3  WHERE id = 'CcU-2938';
```

The results grid displays one row of data:

id	iban	pan	pin	cvv	expiring_date
CcU-2938	TR301960312213576817638661	5424465566813633	3257	984	10/30/22

Below the grid, the status bar shows "Query Completed".

Fem el canvi de registre i comprovem que el canvi s'ha realitzat

The screenshot shows the MySQL Workbench interface with the following details:

- Left Panel (Schemas):** Shows the database structure. Under the 'transactions' schema, there is a 'credit_card' table which contains columns: id, iban, pan, pin, cvv, and expiring_date.
- SQL Editor:** Displays the following SQL code:

```
1 UPDATE credit_card SET iban = 'R323456312213576817699999' WHERE id = 'CcU-2938';
2
3
4 • SELECT *
5   from credit_card
6 WHERE id = 'CcU-2938';
```
- Result Grid:** Shows the result of the SELECT query. The table has columns: id, iban, pan, pin, cvv, and expiring_date. One row is displayed:

id	iban	pan	pin	cvv	expiring_date
CcU-2938	R323456312213576817699999	5424465566813633	3257	984	10/30/22
- Action Output:** Shows the history of actions taken. The last action was a SELECT query: "372 17:04:37 SELECT * from credit_card WHERE id = 'CcU-2938'" which returned 1 row(s) in 0.00043 sec / 0.000... .

- Exercici 3: nou usuari

En la taula "transaction" ingressa un nou usuari amb la següent informació:

Id	108B1D1D-5B23-A76C-55EF-C568E49A99DD
credit_card_id	CcU-9999
company_id	b-9999
user_id	9999
lat	829.999
longitude	-117.999
amount	111.11
declined	0

Usem el codi per a afegir nova entrada

The screenshot shows the MySQL Workbench interface with the 'transactions' schema selected. In the central pane, a SQL editor contains the following code:

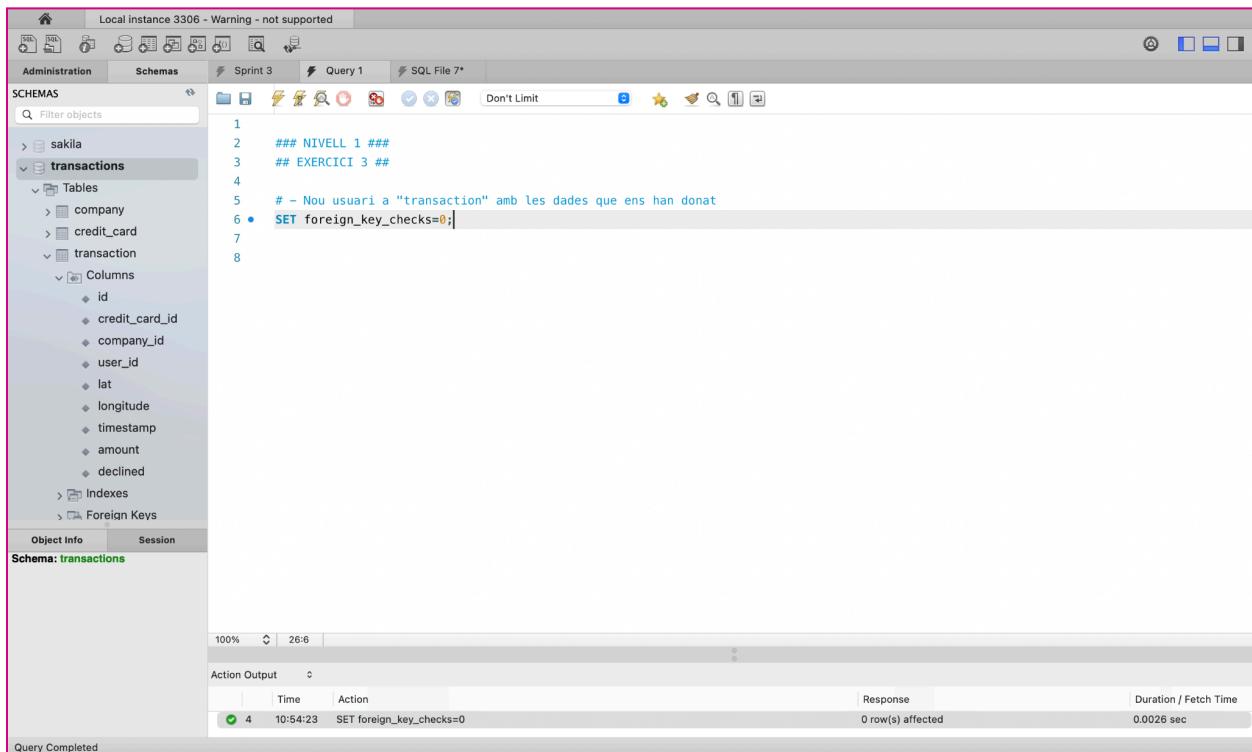
```
1  ## NIVELL 1 ##
2  ## EXERCICI 3 ##
3
4
5  # - Nou usuari a "transaction" amb les dades que ens han donat
6 •  INSERT into transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined) VALUES ('108B1D1D-5B23-A76C-55EF-C568E49A99DD', 'CcU-9999', 'b-9999', '9999', 829.999, -117.999, 111.11, 0)
```

The status bar at the bottom indicates 'Query interrupted'.

Com que ens dóna error

```
Error Code: 1452. Cannot add or update a child row: a foreign key  
constraint fails (`transactions`.`transaction`, CONSTRAINT  
`transaction_ibfk_1` FOREIGN KEY (`company_id`) REFERENCES `company`  
(`id`))
```

Desactivarem les restriccions temporalment per a afegir aquesta entrada.



The screenshot shows the MySQL Workbench interface. The left sidebar displays the schema tree for the 'transactions' database, showing tables like 'company', 'credit_card', 'transaction', and their columns. The main area is the SQL editor with the following query:

```
1  
2  ### NIVELL 1 ###  
3  ## EXERCICI 3 ##  
4  
5  # - Nou usuari a "transaction" amb les dades que ens han donat  
6 •  SET foreign_key_checks=0;
```

The results pane at the bottom shows the execution log:

Action	Time	Action	Response	Duration / Fetch Time
4	10:54:23	SET foreign_key_checks=0	0 row(s) affected	0.0026 sec

A message 'Query Completed' is visible at the bottom left.

I ara podem afegir aquesta entrada

The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'transactions' schema is selected. The main area displays the following SQL code:

```
1
2  ### NIVELL 1 ###
3  ## EXERCICI 3 ##
4
5  # - Nou usuari a "transaction" amb les dades que ens han donat
6  SET foreign_key_checks=0;
7
8  •  INSERT into transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined)
9  VALUES ('108B1D1D-5B23-A76C-55EF-C568E49A99DD', 'CcU-9999', 'b-9999', '9999', '829.999', '-117.999', '111.11', '0');
10
11
```

The results pane at the bottom shows the execution details:

Action	Time	Response	Duration / Fetch Time
INSERT into transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined) VALUES ('108B1D1D-5B23-A76C-55EF-C568E49A99DD', 'CcU-9999', 'b-9999', '9999', '829.999', '-117.999', '111.11', '0')	10:55:40	1 row(s) affected	0.0063 sec

Query Completed

Comprovem que l'entrada s'ha afegit a la nostra taula

The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'transactions' schema is selected. The main area displays the following SQL code:

```
1 •  SELECT *
2   FROM transaction
3   WHERE id = '108B1D1D-5B23-A76C-55EF-C568E49A99DD';
```

The results pane at the bottom shows the execution details and the retrieved data:

Action	Time	Response	Duration / Fetch Time
SELECT * FROM transaction WHERE id = '108B1D1D-5B23-A76C-55EF-C568E49A99DD'	10:58:10	0 rows returned	0.0002 sec / 0.0000...
SELECT * FROM transaction WHERE id = '108B1D1D-5B23-A76C-55EF-C568E49A99DD'	10:59:12	1 row(s) returned	0.00076 sec / 0.0000...

Query Completed

Quan afegim de nou les restriccions, MySQL no revalida l'entrada que hem afegit

The screenshot shows the MySQL Workbench interface. The left sidebar displays the database schema for the 'transactions' table, including columns like id, credit_card_id, company_id, user_id, lat, longitude, timestamp, amount, and declined. The main query editor window contains the command:

```
1 • SET foreign_key_checks=1;
```

The status bar at the bottom indicates "Query Completed". Below the query editor, the "Action Output" section shows the results of the command:

Action	Time	Response	Duration / Fetch Time
SET foreign_key_checks=1	11:01:37	0 row(s) affected	0.00057 sec

Havíem solucionat aquest exercici desactivant les restriccions temporalment i això no és una bona solució a llarg termini. El que hauríem de fer seria afegir aquests ids a les altres taules, encara que la resta de l'entrada sigui null.

Així doncs, començarem esborrant aquesta entrada que havíem afegit. Primer buscarem l'entrada:

The screenshot shows the MySQL Workbench interface. In the top navigation bar, it says "Local instance 3306 - Warning - not supported". Below the bar, there are tabs for Administration, Schemas, Sprint 3, and SQL File 17*. The SQL Editor contains the following query:

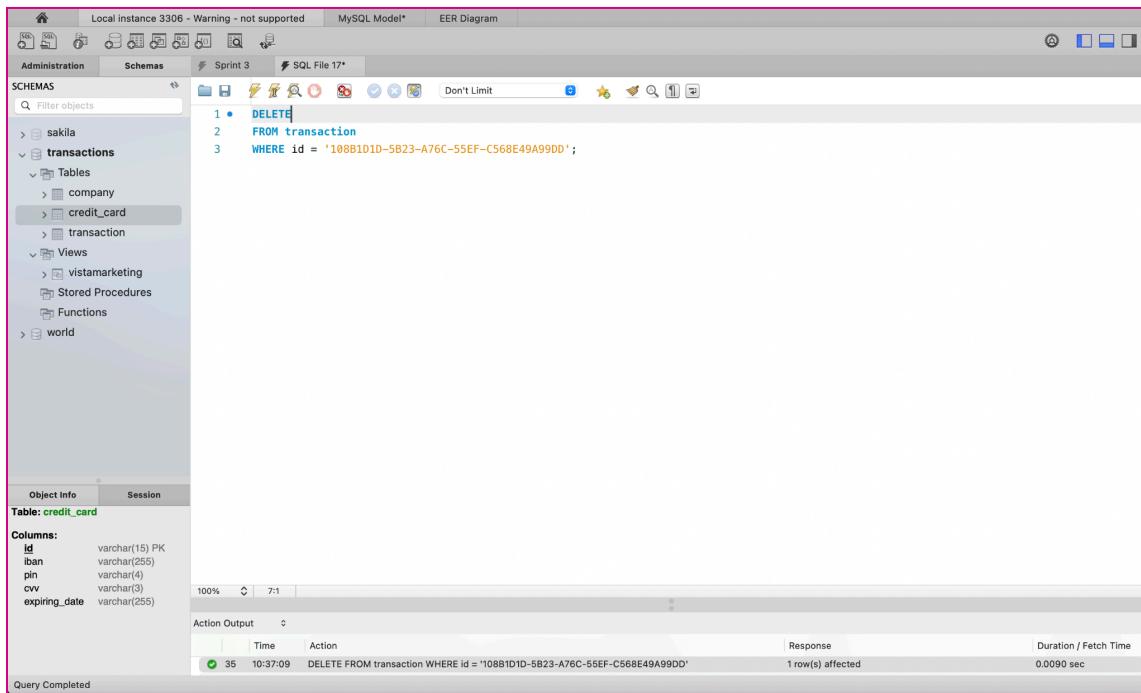
```
1 • SELECT *
2   FROM transaction
3 WHERE id = '108B1D1D-5B23-A76C-55EF-C568E49A99DD';
```

The Result Grid displays the results of the query:

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
108B1D1D-5B23-A76C-55EF-C568E49...	CcU-9999	b-9999	9999	829.999	-117.999	NULL	111.11	0
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Below the grid, the status bar shows "Query Completed". On the right side of the interface, there is a sidebar with various tools and icons.

I li diguem que l'esborri

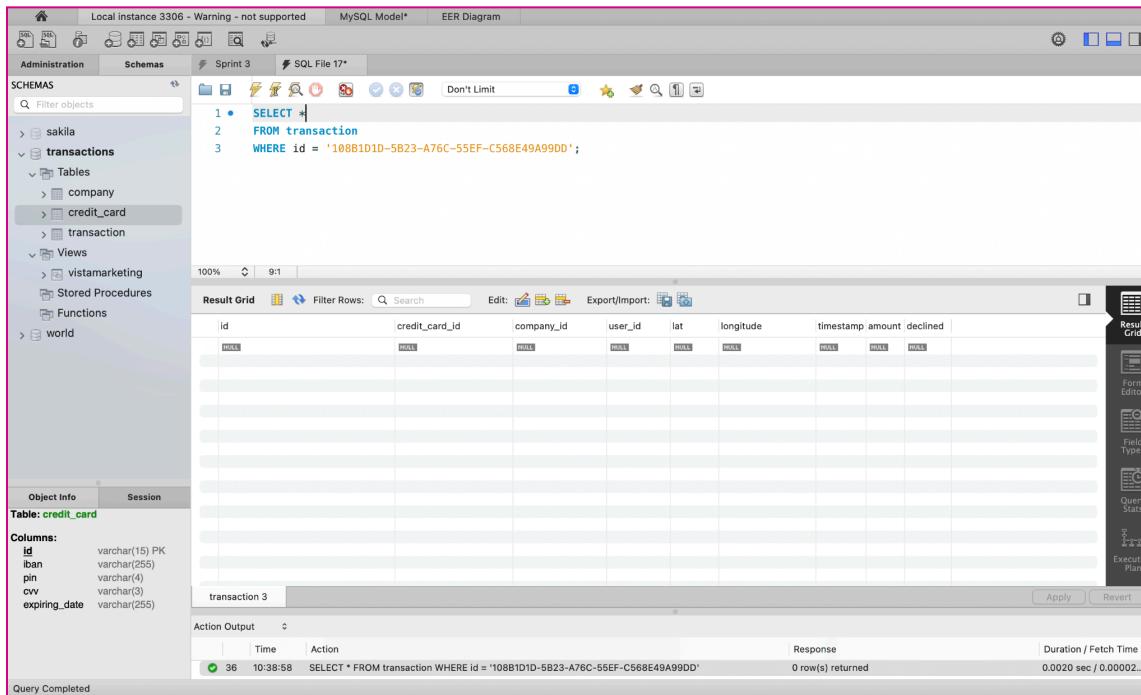


The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'SCHEMAS' section, the 'transactions' schema is selected, and within it, the 'credit_card' table is highlighted. The main pane displays a SQL editor with the following query:

```
1 • DELETE
2   FROM transaction
3   WHERE id = '108B1D1D-5B23-A76C-55EF-C568E49A99DD';
```

Below the query, the 'Object Info' tab is selected, showing details for the 'credit_card' table, including its columns: id, iban, pin, cvv, and expiring_date. The 'Session' tab is also visible. At the bottom, the status bar indicates 'Query Completed'.

Comprovem que està esborrat



The screenshot shows the MySQL Workbench interface again. The 'transactions' schema and 'credit_card' table are selected in the sidebar. The SQL editor contains the following query:

```
1 • SELECT
2   FROM transaction
3   WHERE id = '108B1D1D-5B23-A76C-55EF-C568E49A99DD';
```

The main pane now displays a 'Result Grid' showing the results of the SELECT query. The grid has columns: id, credit_card_id, company_id, user_id, lat, longitude, timestamp, amount, and declined. All rows are currently empty, indicating no data was found. The status bar at the bottom shows 'Query Completed'.

[Tornem a l'N1E1 a afegir la relació entre taules]

- Exercici 4: eliminar columna

Des de recursos humans et sol·liciten eliminar la columna "pan" de la taula credit_card. Recorda mostrar el canvi realitzat.

Comencem donant un ull a la taula credit_card

The screenshot shows the MySQL Workbench interface with the following details:

- Schemas:** sakila, transactions
- Tables:** company, credit_card
- Columns:** id, iban, pan, pin, cvv, expiring_date
- Object Info:** credit_card
- Table:** credit_card
- Columns:** id, iban, pan, pin, cvv, expiring_date
- Query:** A query is being run:

```
2
3  ### NIVELL 1 ####
4  ## EXERCICI 4 ##
5  # - Eliminar la columna "pan" de la taula credit_card
6
7 •  SELECT *
8   FROM credit_card;
```
- Result Grid:** Shows the results of the query, listing 275 rows of data from the credit_card table.
- Action Output:** Shows the execution details:

Action	Time	Response	Duration / Fetch Time
11 11:48:16	SELECT * FROM credit_card	275 row(s) returned	0.037 sec / 0.00045...

Treiem la columna pan

The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'credit_card' table is selected. In the main pane, a query editor window is open with the following SQL code:

```

1
2
3  ### NIVELL 1 ###
4  ## EXERCICI 4 ##
5  # - Eliminar la columna "pan" de la taula credit_card
6 • ALTER TABLE credit_card
7   DROP COLUMN pan;

```

The status bar at the bottom indicates 'Query Completed'.

I comprovem que la columna ja no està

The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'credit_card' table is selected. In the main pane, a query editor window is open with the following SQL code:

```

1
2 • SELECT *
3   FROM credit_card;

```

The results grid displays the data from the 'credit_card' table, which now lacks the 'pan' column. The status bar at the bottom indicates 'Query Completed'.

id	iban	pin	cvv	expiring_date
CcU-2938	R323456312213576817699999	3257	984	10/30/22
CcU-2945	D026854763748537475216568689	9080	887	08/24/23
CcU-2952	BG45VQL52710525608255	4598	438	06/29/21
CcU-2958	CR7242477244335841535	3583	667	02/24/23
CcU-2966	BG72LKT015627628377363	4909	130	10/29/24
CcU-2973	PT87806228135024294656346	8760	887	01/30/25
CcU-2980	PT87806228135024294656346	5970	597	01/30/25
CcU-2987	GE989143483774578113	2588	797	10/11/23
CcU-2994	BH627144238380667652094	7545	595	09/28/22
CcU-3001	CY4908742665474581266832110	9562	867	09/16/22
CcU-3008	LU507216693616119230	1856	740	04/05/25
CcU-3015	PS119398216295715668342456821	3246	822	01/31/22
CcU-3022	G791651628505456977423121857	5610	342	04/25/25
CcU-3029	AZ6231741398241418123739746	9708	505	09/02/23
CcU-3036	Z23933600292584265843941994	2233	565	10/27/25
CcU-3043	TN648814398241418123739746	5634	196	06/07/25
CcU-3050	PR5167744368175836831854477	4834	126	10/09/23
CcU-3057	LU931822574697545215	6805	648	09/14/25
CcU-3064	PS14696554544925337627273133	5985	498	08/03/25

The status bar at the bottom indicates '275 row(s) returned'.

Nivell 2

- Exercici 1: eliminar registre

Elimina de la taula transaction el registre amb ID 02C6201E-D90A-1859-B4EE-88D2986D3B02 de la base de dades.

Comencem localitzant aquest regista a la taula

The screenshot shows the MySQL Workbench interface. On the left, the 'Schemas' tree view is open, showing the 'transactions' schema with its tables: 'company', 'credit_card', and 'transaction'. The 'credit_card' table is selected. The main area displays a SQL editor with the following query:

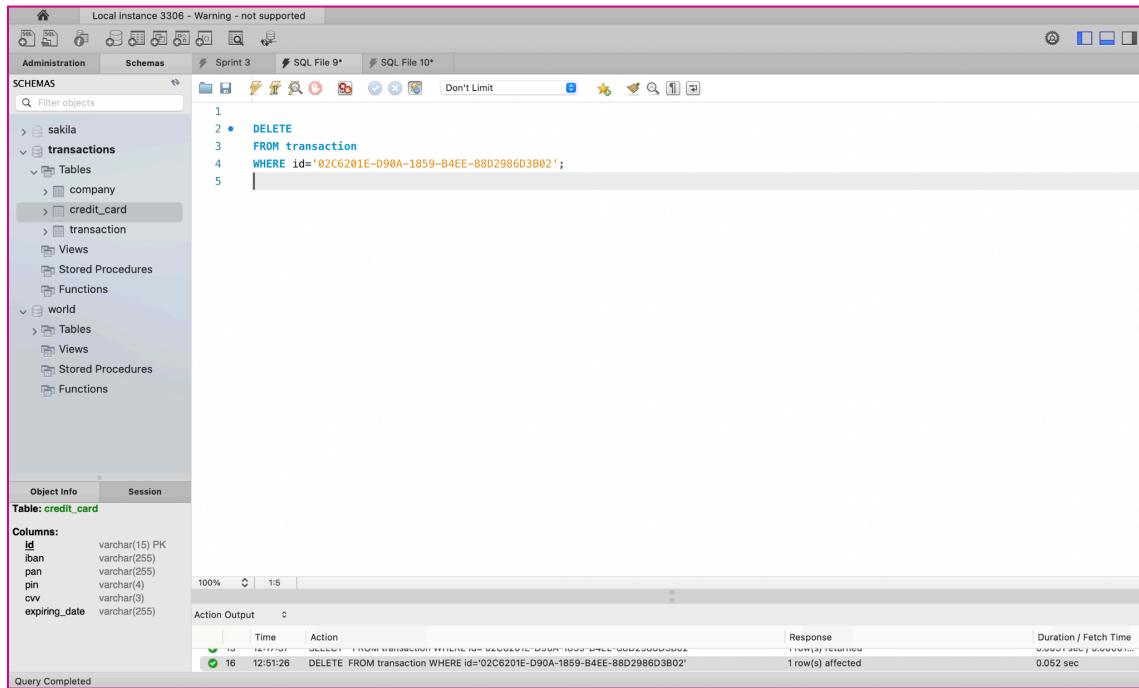
```
1 •  SELECT *
2   FROM transaction
3  WHERE id='02C6201E-D90A-1859-B4EE-88D2986D3B02';
```

Below the SQL editor is a 'Result Grid' showing the results of the query. The grid has columns: id, credit_card_id, company_id, user_id, lat, longitude, timestamp, amount, and declined. One row is visible, corresponding to the ID specified in the query. The timestamp column shows '2021-08-28 23:42:24'. The 'Field Types' panel on the right indicates that the 'id' column is of type 'BLOB'.

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
02C6201E-D90A-1859-B4EE-88D2986... NULL	CcU-2938 NULL	b-2362 NULL	92 NULL	81.9185 NULL	-12.5276 NULL	2021-08-28 23:42:24 NULL	466.92 NULL	0 NULL

At the bottom, the 'Action Output' section shows the query execution details: 1 row(s) returned, duration 0.0031 sec / 0.00001..

L'esborrem

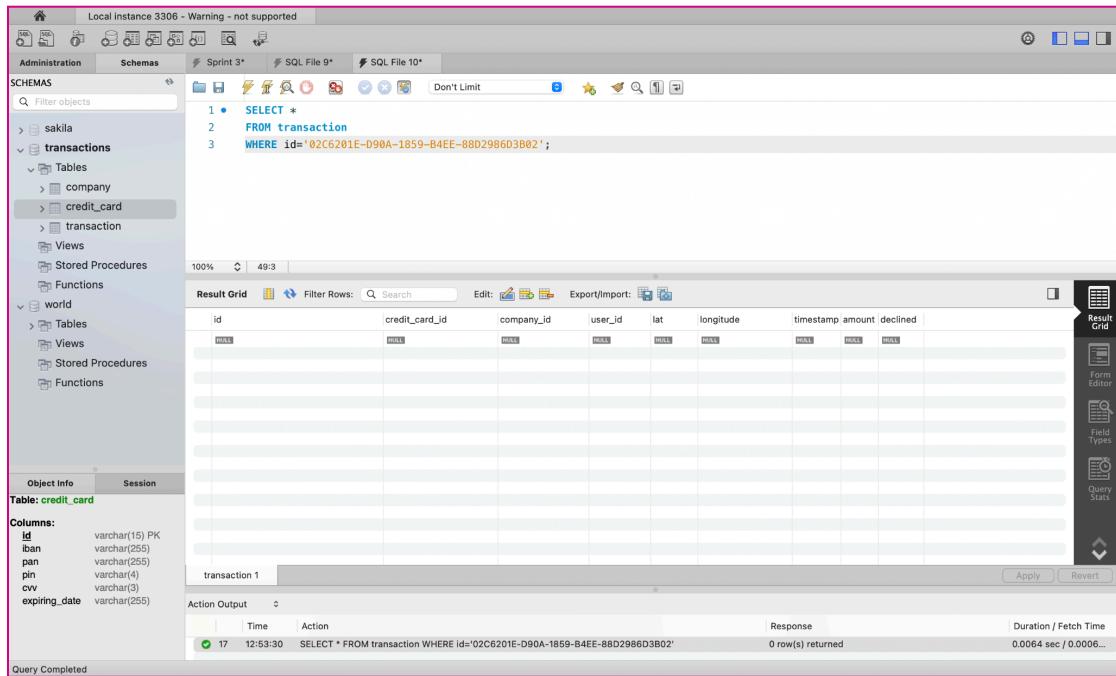


The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'credit_card' table is selected. The main pane displays a SQL query:

```
1
2 •  DELETE
3   FROM transaction
4   WHERE id='02C6201E-D90A-1859-B4EE-88D298603B02';
```

The status bar at the bottom indicates "Query Completed".

I comprovem que ja no està



The screenshot shows the MySQL Workbench interface. In the left sidebar, under the 'Schemas' section, the 'credit_card' table is selected. The main pane displays a SQL query:

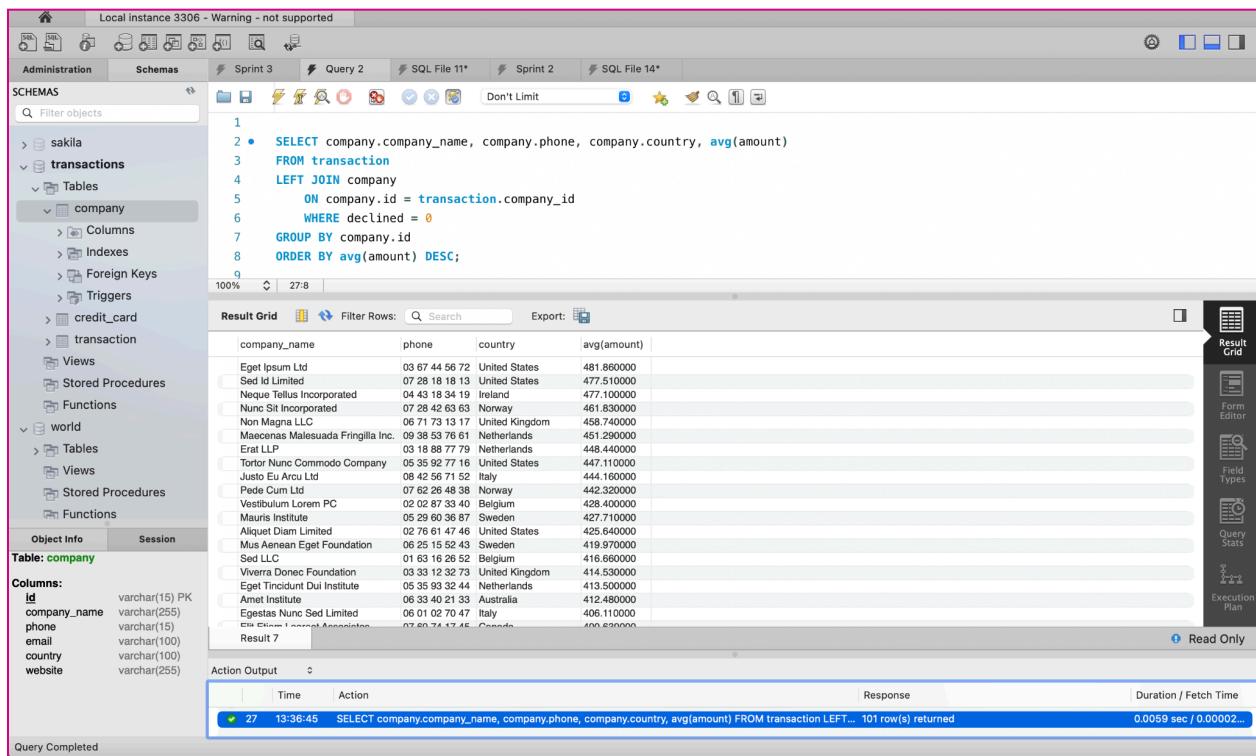
```
1 •  SELECT *
2   FROM transaction
3   WHERE id='02C6201E-D90A-1859-B4EE-88D298603B02';
```

The results pane shows a 'Result Grid' with columns: id, credit_card_id, company_id, user_id, lat, longitude, timestamp, amount, declined. All fields are marked as 'NULL'. The status bar at the bottom indicates "Query Completed".

- Exercici 2: vista

La secció de màrqueting desitja tenir accés a informació específica per a realitzar anàlisi i estratègies efectives. S'ha sol·licitat crear una vista que proporcioni detalls clau sobre les companyies i les seves transaccions. Serà necessària que creïs una vista anomenada VistaMarketing que contingui la següent informació: Nom de la companyia. Telèfon de contacte. País de residència. Mitjana de compra realitzat per cada companyia. Presenta la vista creada, ordenant les dades de major a menor mitjana de compra.

Comencem fent la consulta amb el join



The screenshot shows the MySQL Workbench interface. The left sidebar displays the database schema with the 'company' table selected. The main area contains an SQL query window and a results grid.

```
1
2 •  SELECT company.company_name, company.phone, company.country, avg(amount)
3   FROM transaction
4   LEFT JOIN company
5     ON company.id = transaction.company_id
6     WHERE declined = 0
7   GROUP BY company.id
8   ORDER BY avg(amount) DESC;
```

The results grid shows the following data:

company_name	phone	country	avg(amount)
Eget Ipsum Ltd	03 67 44 56 72	United States	481.860000
Sed id Limited	07 28 18 18 13	United States	477.510000
Neque Tellus Incorporated	04 43 18 34 19	Ireland	477.100000
Nunc Sit Incorporated	07 28 42 63 63	Norway	461.830000
Non Magna LLC	06 71 73 13 17	United Kingdom	458.740000
Maecenas Malesuada Fringilla Inc.	09 38 53 76 61	Netherlands	451.290000
Erat LLP	03 18 88 77 79	Netherlands	448.440000
Tortor Nunc Commodo Company	05 35 92 77 16	United States	447.110000
Justo Eu Arcu Ltd	08 42 56 71 52	Italy	444.160000
Pede Cum Ltd	07 62 26 48 38	Norway	442.320000
Vestibulum Lorem PC	02 02 87 33 40	Belgium	428.400000
Mauris Institute	05 29 60 36 87	Sweden	427.710000
Aliquet Diam Limited	02 76 61 47 46	United States	425.640000
Mus Aenean Eget Foundation	06 25 15 52 43	Sweden	419.970000
Sed LLC	01 73 82 82 82	Belgium	416.660000
Vivamus Donec Foundation	03 33 12 32 73	United Kingdom	414.660000
Eget Tincidunt Duis Institute	05 35 89 32 44	Netherlands	413.500000
Amet Institute	06 33 40 21 33	Australia	412.480000
Egestas Nunc Sed Limited	06 01 02 70 47	Italy	406.110000
Eget Diam Limited			

Action Output: 27 13:36:45 SELECT company.company_name, company.phone, company.country, avg(amount) FROM transaction LEFT... 101 row(s) returned Duration / Fetch Time: 0.0059 sec / 0.00002...

Ara cream la vista i refresquem els schemas per a veure-la

The screenshot shows the MySQL Workbench interface with the 'Schemas' tab selected. In the left sidebar, under the 'schemas' section, a new schema named 'vistamarketing' is visible. A blue box highlights this new schema. The main pane displays the SQL code for creating the 'VistaMarketing' view:

```
1 • CREATE VIEW VistaMarketing AS
2   SELECT company.company_name, company.phone, company.country, avg(amount)
3   FROM transaction
4   LEFT JOIN company
5     ON company.id = transaction.company_id
6     WHERE declined = 0
7   GROUP BY company.id
8   ORDER BY avg(amount) DESC;
```

The status bar at the bottom indicates "Query Completed".

Comprovem cridant la vista

The screenshot shows the MySQL Workbench interface with the 'Schemas' tab selected. The 'vistamarketing' schema is highlighted with a blue box. The main pane shows the SQL query:

```
1 • SELECT *
2   FROM vistamarketing;
```

The results grid displays the data returned by the query:

company_name	phone	country	avg(amount)
Eget Ipsum Ltd	03 67 44 56 72	United States	481.860000
Sed Id Limited	07 28 18 18 13	United States	477.510000
Necque Tellus Incorporated	04 43 18 34 19	Ireland	477.100000
Nunc Sit Incorporated	07 28 42 63 63	Norway	461.830000
Non Magna LLC	06 71 73 13 17	United Kingdom	458.740000
Maecenas Malesuada Fringilla Inc.	09 38 53 76 61	Netherlands	451.290000
Erat LLP	03 18 88 77 79	Netherlands	448.440000
Tortor Nunc Commodo Company	05 35 92 77 16	United States	447.110000
Justo Eu Arcu Ltd	08 42 56 71 52	Italy	444.160000
Pede Cum Lrd	07 62 26 48 38	Norway	442.320000
Vestibulum Lorem PC	02 02 87 33 40	Belgium	428.400000
Mauris Institute	05 29 60 36 87	Sweden	427.710000
Aliquet Diam Limited	02 76 61 47 46	United States	425.640000
Mus Aenean Eget Foundation	06 25 15 52 43	Sweden	419.970000
Sed LLC	01 63 16 26 52	Belgium	416.660000
Viverra Donec Foundation	03 33 12 32 73	United Kingdom	414.530000
Eget Tincidunt Duis Institute	05 35 93 32 44	Netherlands	413.500000
Amet Institute	06 33 40 21 33	Australia	412.480000
Egestas Nunc Sed Limited	06 01 02 70 47	Italy	406.110000
Etiam Lauret Associates	07 69 74 17 45	Canada	400.630000

The status bar at the bottom indicates "Query Completed".

- Exercici 3: filtrar vista

Filtra la vista VistaMarketing per a mostrar només les companyies que tenen el seu país de residència en "Germany"

Cridem la vista i li apliquem el filtre WHERE com si fos una taula qualsevol

The screenshot shows the MySQL Workbench interface. On the left, the 'Schemas' tree view is open, showing the 'sakila' schema with its tables like 'transactions', 'company', and 'vistamarketing'. The 'vistamarketing' table is selected. The main area contains a query editor with the following SQL code:

```
1
2 •  SELECT *
3   FROM vistamarketing
4   WHERE country = 'Germany';
5
```

Below the query editor is a 'Result Grid' showing the results of the query. The columns are 'company_name', 'phone', 'country', and 'avg(amount)'. The data includes:

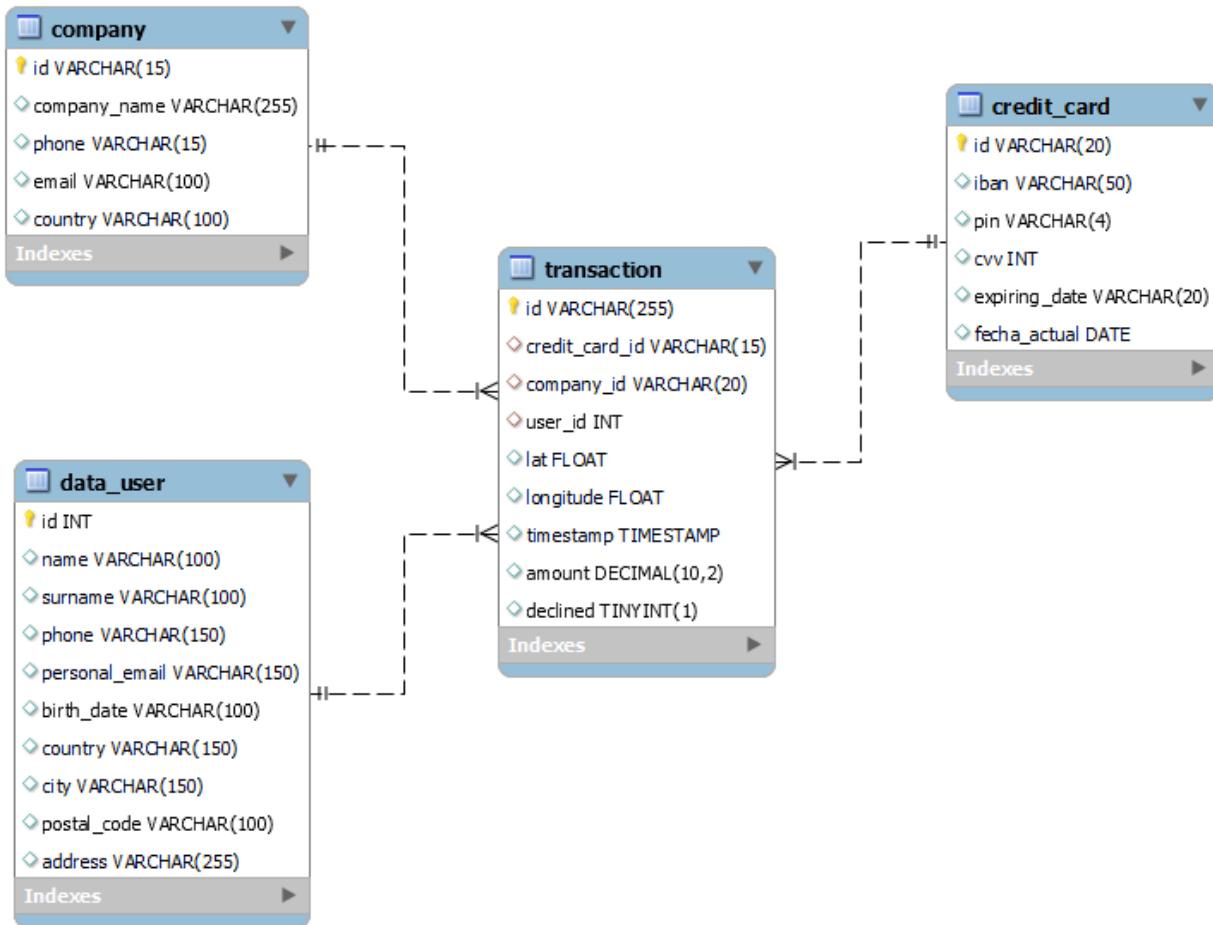
company_name	phone	country	avg(amount)
Ac Industries	09 34 65 40 60	Germany	396.150000
Auditor Mauris Corp.	05 62 87 14 41	Germany	308.990000
Ac Fermentum Incorporated	06 85 56 52 33	Germany	293.570000
Aliquam PC	01 45 73 52 16	Germany	280.340000
Rutrum Non Inc.	02 66 31 61 09	Germany	266.900000
Nunc Interdum Incorporated	05 18 15 48 13	Germany	242.947692
Convallis In Incorporated	06 66 57 29 50	Germany	60.990000
Augue Foundation	06 88 43 15 63	Germany	15.050000

At the bottom, the status bar shows 'Query Completed' and the execution details: Action Output (30 rows), Time (13:47:12), Action (SELECT * FROM vistamarketing WHERE country = 'Germany'), Response (8 row(s) returned), Duration / Fetch Time (0.0054 sec / 0.0000...), and a 'Read Only' indicator.

Nivell 3

- Exercici 1: modificacions base dades

La setmana vinent tindràs una nova reunió amb els gerents de màrqueting. Un company del teu equip va realitzar modificacions en la base de dades, però no recorda com les va realitzar. Et demana que l'ajudis a deixar els comandos executats per a obtenir el següent diagrama:



Recordatori

En aquesta activitat, és necessari que descriguis el "pas a pas" de les tasques realitzades. És important realitzar descripcions senzilles, simples i fàcils de comprendre. Per a realitzar aquesta activitat hauràs de treballar amb els arxius denominats "estructura_dades_user" i "dades_introduir_user"

- Exercici 2: informe técnico

L'empresa també et sol·licita crear una vista anomenada "InformeTecnico" que contingui la següent informació:

- ID de la transacció
- Nom de l'usuari/ària
- Cognom de l'usuari/ària
- IBAN de la targeta de crèdit usada.
- Nom de la companyia de la transacció realitzada.
- Assegura't d'incloure informació rellevant de totes dues taules i utilitza àlies per a canviar de nom columnes segons sigui necessari.

Mostra els resultats de la vista, ordena els resultats de manera descendente en funció de la variable ID de transaction.

```
SELECT *
transaction.id
JOIN transaction.user_id per a nom i cognom
JOIN transaction.credit_card_id per a IBAN
JOIN company per a company.company_name

ORDER BY transaction.id DESC
```