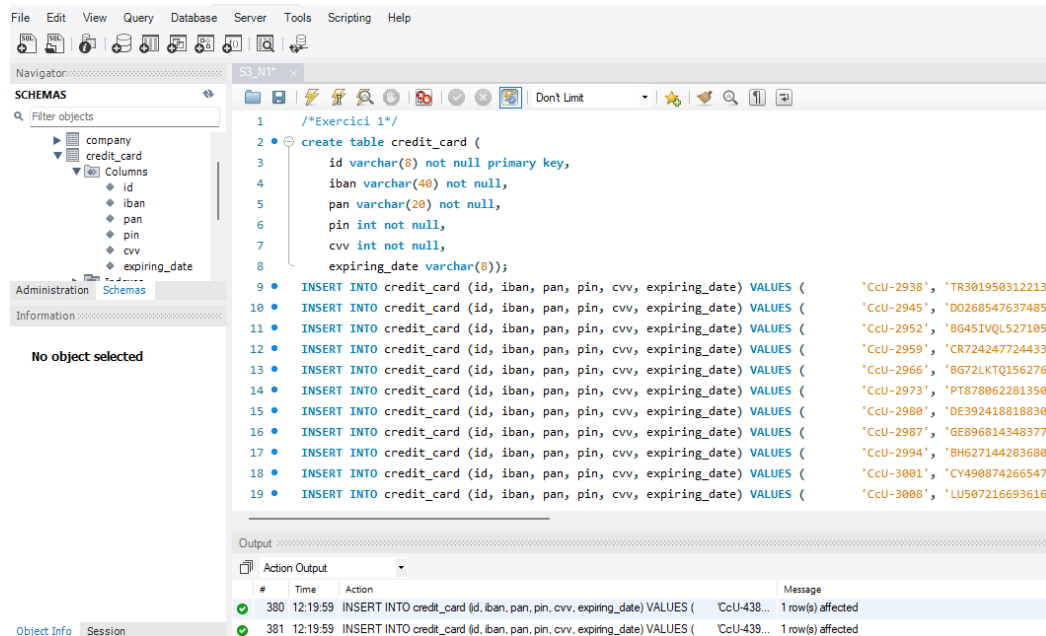


SPRINT 3

NIVELL 1

Exercici 1

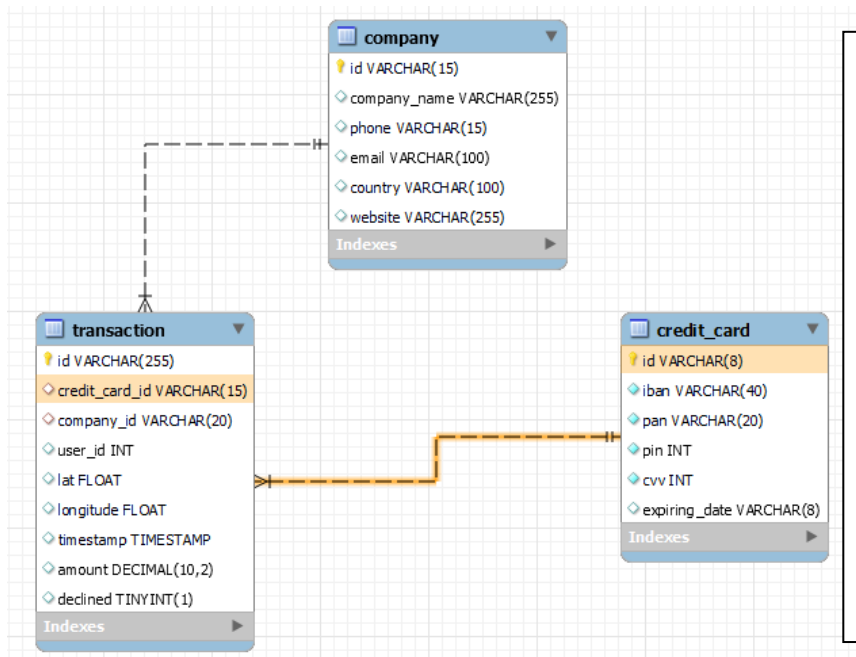


The screenshot shows a database management tool interface. The top menu bar includes File, Edit, View, Query, Database, Server, Tools, Scripting, and Help. The left sidebar shows a 'SCHEMAS' tree with 'company' and 'credit_card' tables. The main area displays SQL queries for creating and inserting data into the 'credit_card' table. The 'Output' pane at the bottom shows the execution results of these queries.

```
1 /*Exercici 1*/
2 create table credit_card (
3     id varchar(8) not null primary key,
4     iban varchar(40) not null,
5     pan varchar(20) not null,
6     pin int not null,
7     cvv int not null,
8     expiring_date varchar(8));
9
10 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2938', 'TR3019503122135
11 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2945', 'DO2685476374853
12 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2952', 'BG45IVQL5271052
13 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2959', 'CR7242477244335
14 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2966', 'BG72LKTQ1562762
15 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2973', 'PT8780622813506
16 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2980', 'DE3924188188308
17 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2987', 'GE8968143483774
18 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2994', 'BH6271442836806
19 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-3001', 'CY4908742665477
20 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-3008', 'LU5072166936161
```

#	Time	Action	Message
380	12:19:59	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-438...	1 row(s) affected
381	12:19:59	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-439...	1 row(s) affected

```
284
285 • alter table transaction add constraint fk_credit_card foreign key (credit_card_id)
286 references credit_card (id) on delete cascade on update cascade;
287 /* D'aquesta manera la taula queda vinculada amb la taula de fets Transactions com una taula de dimensió
288 i a través d'aquesta a l'altra taula de dimensió company. Així formem un model d'estrella.*/
289
```



Creem la taula credit_card i una relació de 1 a molts, assignant-li a la seva PK (id) una FK a la taula transaction (credit_card_id).

Així creem un model d'estrella amb la taula de fets transaction i les de dimensions company i credit_card vinculades a aquesta.

Exercici 2

The screenshot shows a SQL IDE window with a script for Exercise 2. The script includes a comment in Catalan and two SQL statements: an update and a select. The result grid below shows the output of the select statement.

```
287
288 /*Exercici 2
289 El departament de Recursos Humans ha identificat un error en el número de compte de l'usuari amb el: IBAN
290 CcU-2938. Es requereix actualitzar la informació que identifica un compte bancari a nivell internacional
291 (identificat com "IBAN"): TR323456312213576817699999. Recorda mostrar que el canvi es va realitzar.*/
292
293 • update credit_card set iban = 'TR323456312213576817699999'
294   where id = 'CcU-2938';
295 • select iban
296   from credit_card
297   where id = 'CcU-2938';
298
```

Result Grid

iban
TR323456312213576817699999

Exercici 3

The screenshot shows a SQL IDE window with a script for Exercise 3. The script includes a comment in Catalan and several SQL statements: show create table, set foreign key checks, insert, set foreign key checks, and select. The result grid below shows the output of the select statement.

```
305 lat 829.999
306 longitude -117.999
307 amount 111.11
308 declined 0 */
309 • show create table transaction;
310 • set foreign_key_checks = 0;
311 • insert into transaction (id,credit_card_id,company_id,user_id,lat,longitude,amount,declined)
312   values ('10881D1D-5B23-A76C-55EF-C568E49A99DD','CcU-9999','b-9999',9999,829.999,-117.999,111.11,0);
313 • set foreign_key_checks = 1;
314 • select *
315   From transaction
316   where id = '10881D1D-5B23-A76C-55EF-C568E49A99DD';
```

Result Grid

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
10881D1D-5B23-A76C-55EF-C568E49A99DD	CcU-9999	b-9999	9999	829.999	-117.999	NULL	111.11	0
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

transaction 3 x Apply Revert

```

323  /*Exercici 1
324  Elimina de la taula transaction el registre amb ID 02C6201E-D90A-1859-B4EE-88D2986D3B02 de
325  la base de dades*/
326  • delete from transaction
327  where id = '02C6201E-D90A-1859-B4EE-88D2986D3B02';
328  • Select *
329  from transaction
330  where id = '02C6201E-D90A-1859-B4EE-88D2986D3B02';
331

```

Exercici 2

El ejercicio 2 no está bien que uses el max, vas a devolver el valor máximo si hay varios registros de la misma empresa, debiste agrupar por estas variables también de tal manera que te muestre todas las que hayan de cada empresa.

Exercici 2

```
S3_N1 | S3_N2 | SQL File 3* | SQL File 4* | vistamarketing
15 ordenant les dades de major a menor mitjana de compra*/
16 • create view VistaMarketing as
17   select company_name as 'Companyia', max(phone) as 'Telèfon',
18   max(country) as 'País', avg(transaction.amount) as 'Despesa_Mitjana'
19   from company
20   join transaction
```

CORRECCIÓ :

```
15 ordenant les dades de major a menor mitjana de compra*/
16 • create view VistaMarketing as
17   select company_name as 'Companyia', phone as 'Telèfon',
18   country as 'País', avg(transaction.amount) as 'Despesa_Mitjana'
19   from company
20   join transaction
21   on transaction.company_id = company.id
22   group by company_name, Telèfon, País;
23 • select Companyia, Telèfon, País, Despesa_Mitjana
24   from VistaMarketing
25   order by Despesa_Mitjana DESC;
```

Companyia	Telèfon	País	Despesa_Mitjana
Eget Ipsum Ltd	03 67 44 56 72	United States	473.075000
Non Magna LLC	06 71 73 13 17	United Kingdom	468.345000
Sed Id Limited	07 28 18 18 13	United States	461.210000
Justo Eu Arcu Ltd	08 42 56 71 52	Italy	443.635000
Eget Tincidunt Dui Institute	05 35 93 32 44	Netherlands	442.520000
Viverra Donec Foundation	03 33 12 32 73	United Kingdom	442.280000
Viverra Donec Foundation	03 33 12 32 73	United Kingdom	442.280000

VistaMarketing 3 x

Read Only

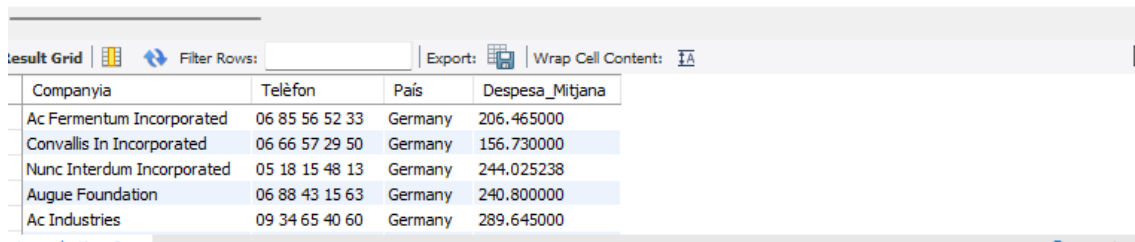
Output

Action Output

#	Time	Action	Message
✓ 5	10:08:15	select Companyia,Telèfon,País,Despesa_Mitjana from VistaMarketing order by Despesa_...	100 row(s) returned
✓ 6	10:14:20	select Companyia,Telèfon,País,Despesa_Mitjana from VistaMarketing order by Despesa_...	100 row(s) returned

Exercici 3

```
30
31  /* Exercici 3
32  Filtra la vista VistaMarketing per a mostrar només les companyies que tenen el seu
33  país de residència en "Germany"*/
34  • select *
35  from vistamarketing
36  where País= 'Germany';
37
38
```



The screenshot shows a database query result grid with the following data:

Companyia	Telèfon	País	Despesa_Mitjana
Ac Fermentum Incorporated	06 85 56 52 33	Germany	206.465000
Convallis In Incorporated	06 66 57 29 50	Germany	156.730000
Nunc Interdum Incorporated	05 18 15 48 13	Germany	244.025238
Augue Foundation	06 88 43 15 63	Germany	240.800000
Ac Industries	09 34 65 40 60	Germany	289.645000

NIVELL 3

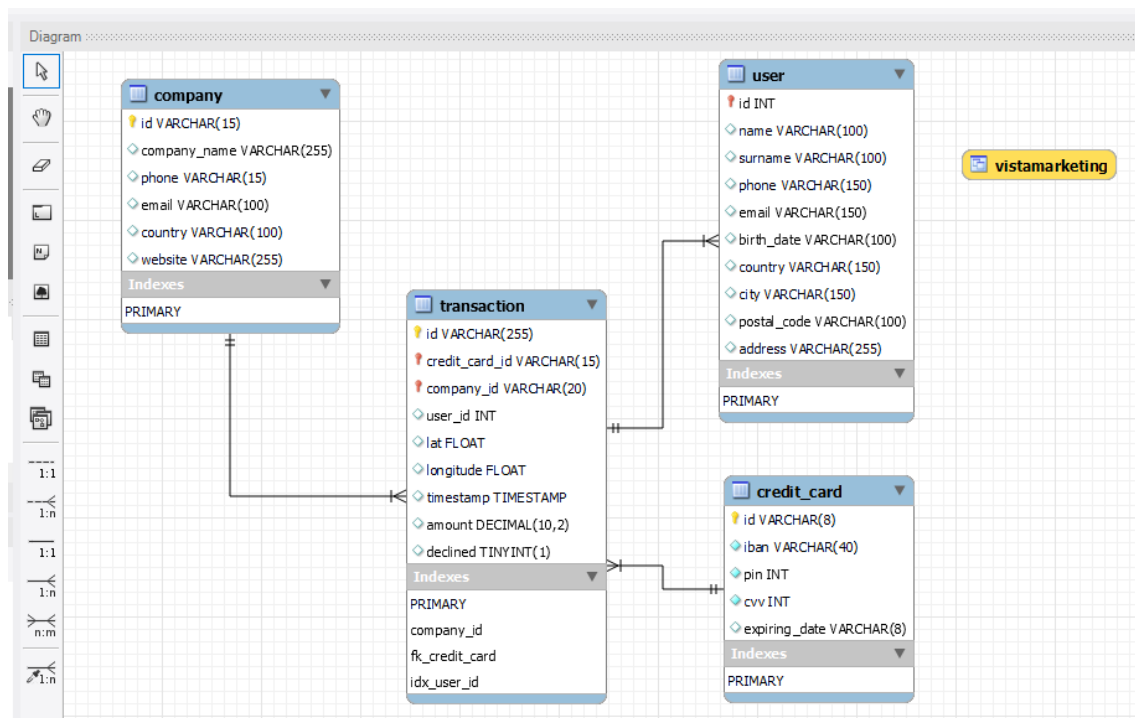
Exercici 1

Un cop creades les taules principals transaction i company i afegit el seu contingut i relacions, a l'exercici 1 del nivell 1, hem afegit l'estructura i el contingut de la nova taula credit_card amb la seva relació amb la taula de fets transactions a través del camp credit_card_id.

Per a la nova modificació que a fet el nostre company seguirem les següents passes:

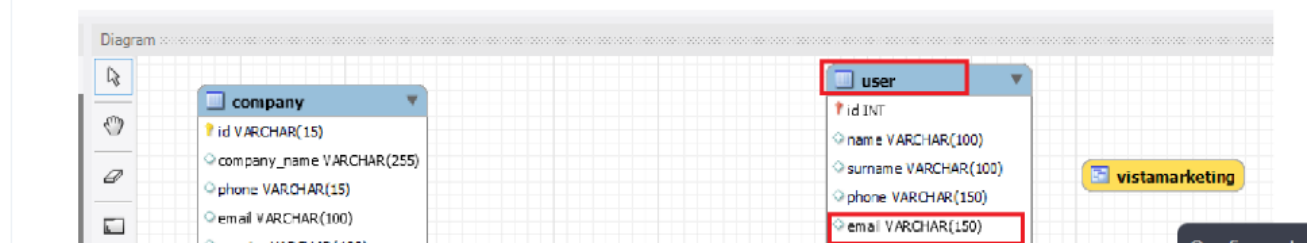
- Crear un Index a transaction amb el camp user.id per optimitzar les consultes amb aquest camp.
- Crear l'estructura de la nova taula user amb l'arxiu estructura_datos_user
- Crear les relacions , en aquest cas estan incloses al codi de creació de la taula:
FOREIGN KEY(id) REFERENCES transaction(user_id)
- Aixecar la restricció de foreign key per poder introduir les dades :
SET foreign_key_checks = 0.
- Afegir el contingut de la taula user amb l'arxiu datos_introducir_user
Tornar a aplicar la restricció feoreign key a les taules per establir la relació entre user i transaction: SET foreign_key_checks = 1;

Després d'aplicar el codi obtenim aquesta estructura de taules:



CORRECCIÓ:

En el ejercicio 1 del nivel 3 me faltó el código usado! A lo que me refiero es que debes mostrar los códigos que utilizaste para llegar a la misma vista que se te muestra.



EL codigo utilizado esta en el archivo SQL, el de la tabla crdir_card esta en el Ejercici 1 y el de user te lo adjunto:

```
6 • CREATE INDEX idx_user_id ON transaction(user_id);
7
8 • CREATE TABLE IF NOT EXISTS user (
9     id INT PRIMARY KEY,
10    name VARCHAR(100),
11    surname VARCHAR(100),
12    phone VARCHAR(150),
13    email VARCHAR(150),
14    birth_date VARCHAR(100),
15    country VARCHAR(150),
16    city VARCHAR(150),
17    postal_code VARCHAR(100),
18    address VARCHAR(255),
19    FOREIGN KEY(id) REFERENCES transaction(user_id)
20 );
21 • SET foreign_key_checks = 0;
22 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (
23 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (
24 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (
25 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (
26 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (
27
28 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (
29 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (
30 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (
31 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES (
32 • SET foreign_key_checks = 1;
```

Exercici 2

```

312 • create view InformeTecnico as
313     select transaction.id as 'Transacció', user.name as 'Nom', user.surname as 'Cognom',
314         credit_card.iban as 'Iban', company.company_name as 'Companyia'
315     from transaction
316     join user
317     on user.id=transaction.user_id
318     join Credit_card
319     on credit_card.id=transaction.credit_card_id
320     join company
321     on company.id=transaction.company_id
322     group by Transacció;

323 • select *
324     from InformeTecnico
325     group by Transacció
326     order by Transacció desc;
327

```

Transacció	Nom	Cognom	Iban	Companyia
FE96CE47-BD59-381C-4E18-E3CA3D44E8FF	Kenyon	Hartman	DO26854763748537475216568689	Magna A Neque Industries
FE809ED4-2DB6-55AC-C915-929516E4646B	Molly	Gilliam	SE2813123487163628531121	Nunc Interdum Incorporated
FD9BCBCD-8E1E-8DA1-4606-7E3A6F3A5A65	Linus	Willis	KW9485332754781757886242955643	Nunc Interdum Incorporated
FD89D51B-AE8D-77DC-E450-B8083FBD3187	Hilda	Levy	LT053237077744561475	Malesuada PC
FD2E8957-414B-BEEC-E9AD-59AA7A8A6290	Hedwig	Gilbert	GE4848451582810541526	Neque Tellus Imperdiet Corp.