

# NIVEL 1

## - EJERCICIO 1

*"Tu tarea consiste en diseñar y crear una tabla llamada "credit\_card" que almacene detalles cruciales sobre las tarjetas de crédito. La nueva tabla debe ser capaz de identificar de manera única cada tarjeta y establecer una relación adecuada con las otras dos tablas ("transaction" y "company"). Después de crear la tabla, será necesario que ingreses la información del documento denominado "dades\_introducir\_credit". No olvides mostrar el diagrama y realizar una breve descripción del mismo."*

Para identificarlo de manera única, al crear la estructura de credit\_card, tengo que establecer como Primary Key al campo ID. Que a su vez, cuando fue creada la tabla transaction ya estaba en esa tabla el campo credit\_card\_id referenciado como clave foránea.

Como punto inicial me situé en la Base de Datos **transactions** para poder crear la nueva Tabla **credit\_card**.

```
1 • USE transactions;
2
3 • CREATE TABLE IF NOT exists credit_card (
4     id VARCHAR(15) PRIMARY KEY,
5     iban VARCHAR(80) NOT NULL,
6     pan VARCHAR(80) NOT NULL,
7     pin CHAR(4) NOT NULL,
8     cvv CHAR(4) NOT NULL,
9     expiring_date VARCHAR(80)
10    );
```

Aclaración: inicialmente había puesto expiring\_date DATE, pero luego en el archivo al no estar en formato YYYY-MM-DD, lo terminé dejando en VARCHAR para que no me diera error al introducir los datos.

**La PRIMARY KEY**, será el id de la Tabla credit\_card.

**Creo una FOREIGN KEY** para poder vincular las operaciones de la Tabla transaction con la Tabla credit\_card.

```

15 • ALTER TABLE transaction
16   ADD constraint credit_card_id
17   foreign key (credit_card_id) references credit_card(id);
18

```

| id       | iban                         | pin  | cvv | expiring_date | fecha_actual |
|----------|------------------------------|------|-----|---------------|--------------|
| CcU-2938 | R323456312213576817699999    | 3257 | 984 | 2022-10-30    | NULL         |
| CcU-2945 | DO26854763748537475216568689 | 9080 | 887 | 2023-08-24    | NULL         |
| CcU-2952 | BG45IVQL52710525608255       | 4598 | 438 | 2021-06-29    | NULL         |
| CcU-2959 | CR7242477244335841535        | 3583 | 667 | 2023-02-24    | NULL         |
| CcU-2966 | BG72LKTQ15627628377363       | 4900 | 130 | 2024-10-29    | NULL         |

**ALTER TABLE** transaction  
**ADD CONSTRAINT** credit\_card\_id  
**FOREIGN KEY** (credit\_card\_id) **REFERENCES** credit\_card(id);

credit\_card 2 x

Output

Action Output

| # | Time     | Action   | Message  |
|---|----------|--|--|
| 1 | 12:59:11 | ALTER TABLE transaction ADD constraint credit_card_id foreign key (credit_card_id) references credit_card... | 587 row(s) affected Records: 587 Duplicates: 0 Warnings: 0 |

Ya creada la tabla y su relación con la tabla transaction paso a ingresar los datos, en la tabla credit\_card.

```

28 -- Insertamos datos de credit_card
29 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2938', 'TR301950312213576817638661', '54
30 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2945', 'DO26854763748537475216568689', '
31 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2952', 'BG45IVQL52710525608255', '4556 4
32 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2959', 'CR7242477244335841535', '3724613
33 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-2966', 'BG72LKTQ15627628377363', '448566

```

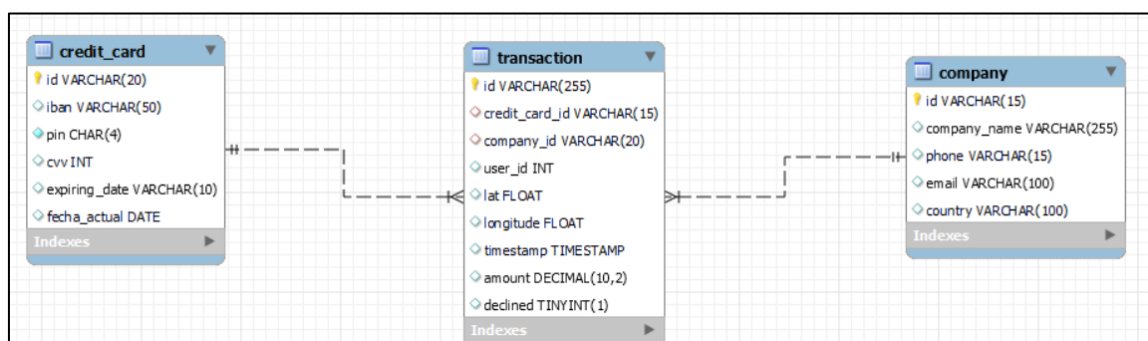
Output

History Output

| Time     | SQL   |
|----------|---|
| 13:43:12 | INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-4856', 'TR373872558313545667124286', '349528235713651', '9086', '974', '05/19/23)  |
| 13:43:12 | INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-4849', 'SE2813123487163628531121', '5223363813491514', '9992', '779', '03/21/25)   |
| 13:43:12 | INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-4842', 'SA2156708581957118818229', '3774 636724 83250', '4655', '750', '11/11/24)  |
| 13:43:12 | INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ( 'CcU-4835', 'PT34592171131763200132583', '3723 677744 22550', '1149', '680', '01/08/24) |

De momento tengo:

- Tabla company con su Clave Primaria ID
- Tabla credit\_card con su Clave Primaria ID
- Tabla transaction con su Clave Primaria ID y las dos Foreign Keys (para relacionarlas con sus respectivas tablas)



## - EJERCICIO 2

*"El departamento de Recursos Humanos ha identificado un error en el número de cuenta del usuario con ID CcU-2938. La información que debe mostrarse para este registro es: R323456312213576817699999. Recuerda mostrar que el cambio se realizó."*

```
1 • select *
2   from credit_card;
3
4 • update credit_card
5   set iban = R323456312213576817699999
6   where id = "CcU-2938";
```

**ANTES de actualización del dato**

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Cont

| id       | iban                         | pan                 | pin  | cvv | expiring_date |
|----------|------------------------------|---------------------|------|-----|---------------|
| CcU-2938 | TR301950312213576817638661   | 5424465566813633    | 3257 | 984 | 2022-10-30    |
| CcU-2945 | DO26854763748537475216568689 | 5142423821948828    | 9080 | 887 | 2023-08-24    |
| CcU-2952 | BG45IVQL52710525608255       | 4556 453 55 5287    | 4598 | 438 | 2021-06-29    |
| CcU-2959 | CR7242477244335841535        | 372461377349375     | 3583 | 667 | 2023-02-24    |
| CcU-2966 | BG72LKTQ15627628377363       | 448566 886747 7265  | 4900 | 130 | 2024-10-29    |
| CcU-2973 | PT87806228135092429456346    | 544 58654 54343 384 | 8760 | 887 | 2025-01-30    |
| CcU-2980 | DE39241881883086277136       | 402400 7145845969   | 5075 | 596 | 2022-07-24    |
| CcU-2987 | GE89681434837748781813       | 3763 747687 76666   | 2298 | 797 | 2023-10-31    |
| CcU-2994 | BH62714428368066765294       | 344283273252593     | 7545 | 595 | 2022-02-28    |
| CcU-3001 | CY49087426654774581266832110 | 511722 924833 2244  | 9562 | 867 | 2022-09-16    |

```
4 • update credit_card
5   set iban = "R323456312213576817699999"
6   where id = "CcU-2938";
7
8 • select *
9   from credit_card;
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wr

| id       | iban                         | pan                 | pin  | cvv | expiring_date |
|----------|------------------------------|---------------------|------|-----|---------------|
| CcU-2938 | R323456312213576817699999    | 5424465566813633    | 3257 | 984 | 2022-10-30    |
| CcU-2945 | DO26854763748537475216568689 | 5142423821948828    | 9080 | 887 | 2023-08-24    |
| CcU-2952 | BG45IVQL52710525608255       | 4556 453 55 5287    | 4598 | 438 | 2021-06-29    |
| CcU-2959 | CR7242477244335841535        | 372461377349375     | 3583 | 667 | 2023-02-24    |
| CcU-2966 | BG72LKTQ15627628377363       | 448566 886747 7265  | 4900 | 130 | 2024-10-29    |
| CcU-2973 | PT87806228135092429456346    | 544 58654 54343 384 | 8760 | 887 | 2025-01-30    |
| CcU-2980 | DE39241881883086277136       | 402400 7145845969   | 5075 | 596 | 2022-07-24    |
| CcU-2987 | GE89681434837748781813       | 3763 747687 76666   | 2298 | 797 | 2023-10-31    |
| CcU-2994 | BH62714428368066765294       | 344283273252593     | 7545 | 595 | 2022-02-28    |
| CcU-3001 | CY49087426654774581266832110 | 511722 924833 2244  | 9562 | 867 | 2022-09-16    |

## - EJERCICIO 3

*En la Tabla "transaction" ingresa un nuevo usuario con la siguiente información:*

|                |                                      |
|----------------|--------------------------------------|
| 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                                    |

Cuando intento ingresar esta transaccion me sale el siguiente error:

```
0 • INSERT INTO transaction (id, credit_card_id, company_id, user_id, lat, longitude, timestamp, amount, declined)
1
put
Action Output
# Time Action Message
1 12:00:57 INSERT INTO transaction (id, credit_card_id, company_id, user_id, lat, longitude, timestamp, amount, declined) Error Code: 1452. Cannot add or update a child row: a foreign key constraint fails (transactions.transaction, CONSTRAINT t
```

Al tener la Tabla transaction las claves foráneas, no puedo ingresar un registro directamente en esa tabla sin antes haber ingresado, los registros correspondientes en Tabla company y Tabla credit\_card. Y por último, ya puedo agregar la operación solicitada.

```
• INSERT INTO company (id) VALUES ("b-9999");
• INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ("CcU-9999", "R323456312213576817699888", "542446556
• INSERT INTO transaction (id, credit_card_id, company_id, user_id, lat, longitude, timestamp, amount, declined) values ("10881
```

Yo opté por esa alternativa, la otra podría haber sido **desactivar las claves foraneas**, **SET foreign\_key\_checks = 0**,

```

7 • INSERT INTO company (id) VALUES ("b-9999");
8
9 • select *
10 from company;

```

| id     | company_name                | phone          | email                          | country        | website                         |
|--------|-----------------------------|----------------|--------------------------------|----------------|---------------------------------|
| b-9999 | Non Institute               | 06 77 15 31 14 | amet.metus@protonmail.couk     | United Kingdom | https://guardian.co.uk/settings |
| b-2618 | Rutrum Non Inc.             | 02 66 31 61 09 | neque@protonmail.net           | Germany        | https://netflix.com/site        |
| b-2610 | Egestas Nunc Sed Limited    | 06 01 02 70 47 | vitae@hotmail.edu              | Italy          | https://walmart.com/one         |
| b-2606 | Sed Est Corp.               | 04 58 02 37 91 | tempor.bibendum@google.couk    | Canada         | https://instagram.com/sub/cars  |
| b-2602 | Placerat LLP                | 05 43 67 24 41 | tellus.suspendisse@hotmail.org | Netherlands    | https://zoom.us/sub             |
| b-2598 | Aliquam Taculis Lacus Corp. | 04 43 07 91 26 | dictum@aol.org                 | Belgium        | https://pinterest.com/one       |
| b-2594 | Et Magnis Ltd               | 03 53 76 11 76 | dapibus.ligula@protonmail.net  | Belgium        | https://instagram.com/sub       |
| b-2590 | Eiusmod Mauris Institute    | 02 13 69 54 85 | vivamus.molestie@icloud.ca     | Belgium        | https://ebay.com/en-ca          |
| b-2586 | Tempor Diam Institute       | 05 01 94 80 87 | curtus.in@yahoo.com            | Netherlands    | https://naver.com/settings      |
| b-2582 | Nibh Phasellus Corporation  | 08 48 67 57 48 | nisi@google.edu                | China          | https://netflix.com/sub/cars    |
| b-2578 | Nulla Quis Institute        | 06 03 78 77 81 | luctus.eit@protonmail.couk     | New Zealand    | https://naver.com/en-us         |

Action Output

| # | Time     | Action                                     | Message           |
|---|----------|--|-------------------|
| 6 | 12:26:26 | INSERT INTO company (id) VALUES ("b-9999") | 1 row(s) affected |

```

9 • INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ("CcU-9999", "R323456312213576817699
10

```

Luego ya paso a agregar la operación en la Tabla Transaction.

```

0 • INSERT INTO transaction (id, credit_card_id, company_id, user_id, lat, longitude, timestamp, amount, declined) values ("108B1D1D-5B23-A76C-55E
1
2 • select *
3 from transaction;

```

| id                                   | credit_card_id | company_id | user_id | lat      | longitude | timestamp           | amount | declined |
|--------------------------------------|----------------|------------|---------|----------|-----------|---------------------|--------|----------|
| 108B1D1D-5B23-A76C-55E4-9A99DD       | CcU-9999       | b-9999     | 9999    | 829999   | -117999   | 2021-08-11 02:02:29 | 111.11 | 0        |
| 9A58B3E0-1E27-94E2-6487-9A63F07BC833 | CcU-4856       | b-2278     | 196     | 20.2527  | -82.4442  | 2021-08-11 02:02:29 | 380.79 | 0        |
| 14CAE5B5-8FB1-3E4A-4C85-0EA4167534F4 | CcU-4849       | b-2302     | 189     | -53.6202 | 93.0533   | 2021-12-31 00:29:42 | 388.04 | 0        |

## - EJERCICIO 4

Desde recursos humanos te solicitan eliminar la columna "pan" de la Tabla credit\_card. Recuerda mostrar el cambio realizado.

```

5 • ALTER TABLE credit_card DROP column pan;
6
7 • select *
8 from credit_card;

```

| id       | iban                          | pin  | cvv | expiring_date |
|----------|-------------------------------|------|-----|---------------|
| CcU-2938 | R323456312213576817699999     | 3257 | 984 | 2022-10-30    |
| CcU-2945 | DO26854763748537475216568689  | 9080 | 887 | 2023-08-24    |
| CcU-2952 | BG451VQL52710525608255        | 4598 | 438 | 2021-06-29    |
| CcU-2959 | CR7242477244335841535         | 3583 | 667 | 2023-02-24    |
| CcU-2966 | BG72LKTQ15627628377363        | 4900 | 130 | 2024-10-29    |
| CcU-2973 | PT87806228135092429456346     | 8760 | 887 | 2025-01-30    |
| CcU-2980 | DE39241881883086277136        | 5075 | 596 | 2022-07-24    |
| CcU-2987 | GE89681434837748781813        | 2298 | 797 | 2023-10-31    |
| CcU-2994 | BH62714428368066765294        | 7545 | 595 | 2022-02-28    |
| CcU-3001 | CY49087426654774581266832110  | 9562 | 867 | 2022-09-16    |
| CcU-3008 | LU507216693616119230          | 1856 | 740 | 2025-04-05    |
| CcU-3015 | PS119398216295715968347456821 | 3246 | 822 | 2022-01-31    |

Action Output

| #  | Time     | Action                                  | Message  |
|----|----------|---|--|
| 17 | 14:32:54 | ALTER TABLE credit_card DROP column pan | 0 row(s) affected Records: 0 Duplicates: 0 Warnings: |

## NIVEL 2

### EJERCICIO 1

*“Elimina de la Tabla transaction el registro con ID 02C6201E-D90A-1859-B4EE-88D2986D3B02 de la base de datos.”*

```
39
40 • DELETE FROM transaction
41   where id = "02C6201E-D90A-1859-B4EE-88D2986D3B02"
42
```

Output

| # | Time     | Action  | Message           |
|---|----------|---|-------------------|
| 1 | 15:43:14 | DELETE FROM transaction where id = "02C6201E-D90A-1859-B4EE-88D2986D3B02" | 1 row(s) affected |

### EJERCICIO 2

*“El departamento de marketing desea acceder a información específica para realizar análisis y estrategias efectivas. Se ha solicitado crear una vista que proporcione detalles clave sobre las compañías y sus transacciones. Será necesario que crees una vista llamada “VistaMarketing” que contenga la siguiente información”*

*(Nombre de la compañía, Teléfono de contacto, País de residencia, Media de compra realizada por cada compañía)*

```
316 • CREATE VIEW VistaMarketing as
317   SELECT c.company_name as Nombre, c.phone as Telefono, c.country as Pais, avg(t.amount) as Promedio
318   FROM company as c
319   JOIN transaction as t
320   ON c.id = t.company_id
321   GROUP BY Nombre, Telefono, Pais
322   ORDER BY Promedio DESC;
323
324 • SELECT *
325   FROM VistaMarketing
326
```

Result Grid

| Nombre                       | Telefono       | Pais           | Promedio   |
|------------------------------|----------------|----------------|------------|
| 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 Instit... | 05 35 93 32 44 | Netherlands    | 442.520000 |
| Viverra Donec Foundation     | 03 33 12 32 73 | United Kingdom | 442.280000 |
| Vestibulum Lorem PC          | 02 02 87 33 40 | Belgium        | 434.060000 |

VistaMarketing 2 x

Output

| # | Time     | Action   | Message           |
|---|----------|--|-------------------|
| 6 | 19:26:57 | CREATE VIEW VistaMarketing as SELECT c.company_name as Nombre, c.phone as Telefono, c.country... | 0 row(s) affected |

## EJERCICIO 3

*Filtra la vista VistaMarketing para mostrar sólo las compañías que tienen su país de residencia en "Germany"*

The screenshot shows a database query interface. At the top, a SQL query is entered in a text area:

```
324 • SELECT *
325 FROM VistaMarketing
326 WHERE Pais = "Germany";
327
```

Below the query, there is a "Result Grid" section. It includes a "Filter Rows" input field, an "Export" button, and a "Wrap Cell Content" checkbox. The grid displays the following data:

| Nombre                    | Telefono       | Pais    | Promedio   |
|---------------------------|----------------|---------|------------|
| Aliquam PC                | 01 45 73 52 16 | Germany | 385.265000 |
| Ac Industries             | 09 34 65 40 60 | Germany | 289.645000 |
| Rutrum Non Inc.           | 02 66 31 61 09 | Germany | 266.900000 |
| Nunc Interdum Incorpor... | 05 18 15 48 13 | Germany | 244.025238 |
| Augue Foundation          | 06 88 43 15 63 | Germany | 240.800000 |
| Ac Fermentum Incorpor...  | 06 85 56 52 33 | Germany | 206.465000 |
| Auctor Mauris Corp.       | 05 62 87 14 41 | Germany | 184.310000 |

Below the result grid, there is an "Output" section. It shows a list of actions and their results:

| # | Time     | Action  | Message             |
|---|----------|---|---------------------|
| 7 | 19:28:10 | SELECT * FROM VistaMarketing                        | 101 row(s) returned |
| 8 | 19:33:21 | SELECT * FROM VistaMarketing WHERE Pais = "Germany" | 8 row(s) returned   |

## NIVEL 3

### EJERCICIO 1

*"La semana próxima tendrás una nueva reunión con los gerentes de marketing. Un compañero de tu equipo realizó modificaciones en la base de datos, pero no recuerda cómo las realizó. Te pide que le ayudes a dejar los comandos ejecutados para obtener el siguiente diagrama:"*

Hasta el momento tenía creadas las siguientes 3 tablas:

- Company
- Credit Card
- Transaction

Considerando el nuevo diagrama hay que considerar una **nueva Tabla Data User**.



```

30 • CREATE INDEX idx_user_id ON transaction(user_id);
31
32 • CREATE TABLE IF NOT EXISTS user (
33     id INT PRIMARY KEY,
34     name VARCHAR(100),
35     surname VARCHAR(100),
36     phone VARCHAR(150),
37     email VARCHAR(150),
38     birth_date VARCHAR(100),
39     country VARCHAR(150),
40     city VARCHAR(150),
41     postal_code VARCHAR(100),
42     address VARCHAR(255),
43     FOREIGN KEY(id) REFERENCES transaction(user_id)
44 );

```

Luego se introducen los datos de la Tabla User.

```

19 • SET foreign_key_checks = 0;
20
21 -- Insertamos datos de user
22 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "1", "Zeus", "G
23 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "2", "Garrett",
24 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "3", "Ciaran",
25 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "4", "Howard",
26 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "5", "Hayfa", "
27 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "6", "Joel", "T
28 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "7", "Rafael",

```

Antes de ingresar los datos paso a aplicar **SET foreign\_key\_checks = 0;** Con ello se desactiva la restricción de clave foránea para toda la base de datos. De lo contrario no me permitiría ingresarlos así directamente. Es decir tendría en su caso que haber agregado primero los registros en la tablas a la cual hace referencia esa clave foránea (es decir, la clave primaria de otra tabla).

Al finalizar la introducción de todos los datos, paso a reactivar la clave foránea.

```

295 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "1", "Zeus", "G
296 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "2", "Garrett",
297
298 • SET foreign_key_checks = 1;

```

Luego otras modificaciones de las tablas:

- De la Tabla **company**, eliminar la columna referida a Website.



```

001 • ALTER TABLE company DROP column website;
002
003 • show columns
004   from company;

```

| Field        | Type         | Null | Key | Default | Extra |
|--------------|--------------|------|-----|---------|-------|
| id           | varchar(15)  | NO   | PRI | NULL    |       |
| company_name | varchar(255) | YES  |     | NULL    |       |
| phone        | varchar(15)  | YES  |     | NULL    |       |
| email        | varchar(100) | YES  |     | NULL    |       |
| country      | varchar(100) | YES  |     | NULL    |       |

Y **elimino** la FOREIGN KEY que estaba establecida por error en la Tabla user. La FOREIGN KEY tiene que estar en la tabla de Hechos, en la Tabla transaction.

```

356 • RENAME TABLE user to data_user;
357 • ALTER TABLE data_user RENAME COLUMN email to personal_email;
358
359 • ALTER TABLE data_user DROP FOREIGN KEY data_user_ibfk_1;
360

```

| #  | Time     | Action  | Message  |
|----|----------|---|--|
| 15 | 11:29:40 | ALTER TABLE data_user DROP FOREIGN KEY data_user_ibfk_1 | 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 |

Y luego establecer la FOREIGN KEY en la tabla correspondiente.

```

361 • SET FOREIGN_KEY_CHECKS = 0;
362
363 • ALTER TABLE transaction
364   ADD constraint fk_user_id
365   FOREIGN KEY (user_id) references data_user(id);
366
367 • SET FOREIGN_KEY_CHECKS = 1;
368

```

De la Tabla **credit\_card**, modificar:

- ID Varchar pasarlo a 20
- IBAN Varchar pasarlo a 50
- CVV pasarlo a INT
- Expiring Date pasarlo a Varchar 10
- Y crear campo fecha\_actual tipo : DATE

```

307 • ALTER TABLE credit_card
308     MODIFY COLUMN id VARCHAR(20),
309     MODIFY COLUMN iban VARCHAR(50),
310     MODIFY COLUMN cvv INT,
311     MODIFY COLUMN expiring_date VARCHAR(10),
312     ADD COLUMN fecha_actual DATE;

```

| Field         | Type        | Null | Key | Default | Extra |
|---------------|-------------|------|-----|---------|-------|
| id            | varchar(20) | NO   | PRI | HULL    |       |
| iban          | varchar(50) | YES  |     | HULL    |       |
| pin           | char(4)     | NO   |     | HULL    |       |
| cvv           | int         | YES  |     | HULL    |       |
| expiring_date | varchar(10) | YES  |     | HULL    |       |
| fecha_actual  | date        | YES  |     | HULL    |       |

En Tabla **user**:

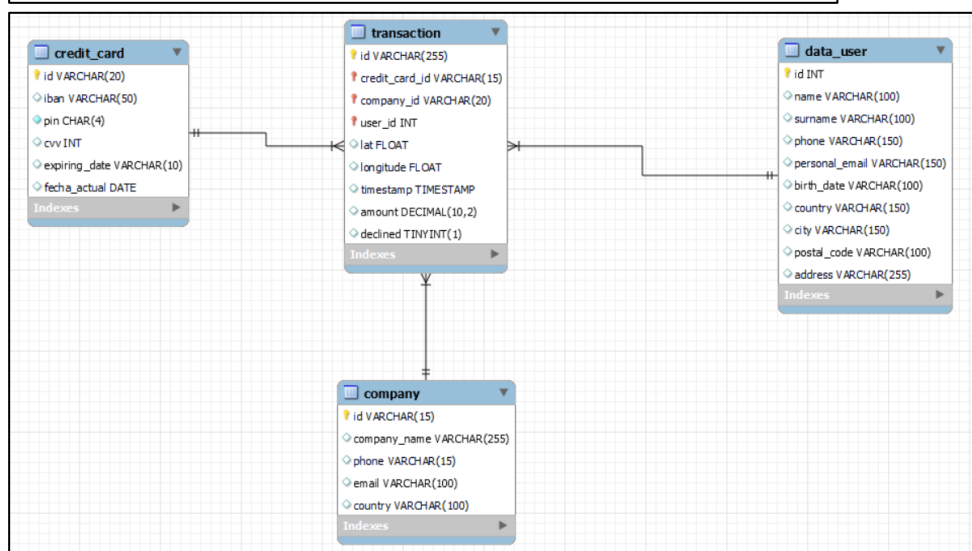
- Modificar el nombre de la tabla y pasarla a **data\_user**
- Email cambiarlo a personal\_email

```

314 • RENAME TABLE user to data_user;
315 • ALTER TABLE data_user RENAME COLUMN email to personal_email;
316
317 • SHOW COLUMNS from data_user;

```

| Field          | Type         | Null | Key | Default | Extra |
|----------------|--------------|------|-----|---------|-------|
| id             | int          | NO   | PRI | HULL    |       |
| name           | varchar(100) | YES  |     | HULL    |       |
| surname        | varchar(100) | YES  |     | HULL    |       |
| phone          | varchar(150) | YES  |     | HULL    |       |
| personal_email | varchar(150) | YES  |     | HULL    |       |
| birth_date     | varchar(100) | YES  |     | HULL    |       |
| country        | varchar(150) | YES  |     | HULL    |       |
| city           | varchar(150) | YES  |     | HULL    |       |
| postal_code    | varchar(100) | YES  |     | HULL    |       |
| address        | varchar(255) | YES  |     | HULL    |       |



## EJERCICIO 2

*“La empresa también te solicita crear una vista llamada "InformeTecnico" que contenga la siguiente información:*

- ID de la transacción*
- Nombre del usuario/a*
- Apellido del usuario/a*
- IBAN de la tarjeta de crédito usada.*
- Nombre de la compañía de la transacción realizada.*

*Asegúrate de incluir información relevante de ambas tablas y utiliza alias para cambiar de nombre columnas según sea necesario.*

*Muestra los resultados de la vista, ordena los resultados de manera descendente en función de la variable ID de transaction.”*

```
322 • CREATE VIEW InformeTecnico AS
323 select t.id as NrOp, d.name as Nombre,d.surname as Apellido, cr.iban as IBAN, co.company_name as Compañia
324 from transaction as t
325 join data_user as d
326 on t.user_id = d.id
327 join credit_card as cr
328 on t.credit_card_id = cr.id
329 join company as co
330 on t.company_id = co.id
331 order by NrOp desc;
332
```

| NrOp                                 | Nombre | Apellido | IBAN                            | Compañia                     |
|--------------------------------------|--------|----------|---------------------------------|------------------------------|
| FD89D51B-AE8D-77DC-E450-B8083FBD3187 | Hilda  | Levy     | LT053237077744561475            | Malesuada PC                 |
| FD2E8957-414B-BEEC-E9AD-59AA7A8A6290 | Hedwig | Gilbert  | GE84848451582810541526          | Neque Tellus Imperdiet Corp. |
| FCE2A89A-271D-2BDC-9E49-8DD92A373391 | Hakeem | Alford   | MD1234119525145401270486        | Nunc Interdum Incorporated   |
| FBD7E0D6-BA6B-F5BC-0CA9-EA4B8760100C | Hedwig | Gilbert  | MJ4132333444534342541344788855  | Mauris Id Inc.               |
| FAC76A80-8448-69AA-E892-426C2F12621C | Slade  | Poole    | MT051WCF58868200575771634583813 | Arcu LLP                     |
| FAAD3FFC-1A17-E141-43D3-359A5BA7C83B | Hedwig | Gilbert  | GE90157928843338134463          | Lorem Eu Incorporated        |
| FA053936-75D8-85FA-490D-9B624E1B920A | Hedwig | Gilbert  | GT02497653655330848247645975    | Non Justo Corp.              |
| F85A7D75-2778-9D75-D776-3F41A828DE88 | Sarah  | Beck     | VG1468087984174645729577        | Ut Semper Foundation         |
| F843DC08-CCB5-2444-1B4E-5966289FBA8B | Jasper | Landry   | VG1468087984174645729577        | Ut Semper Foundation         |