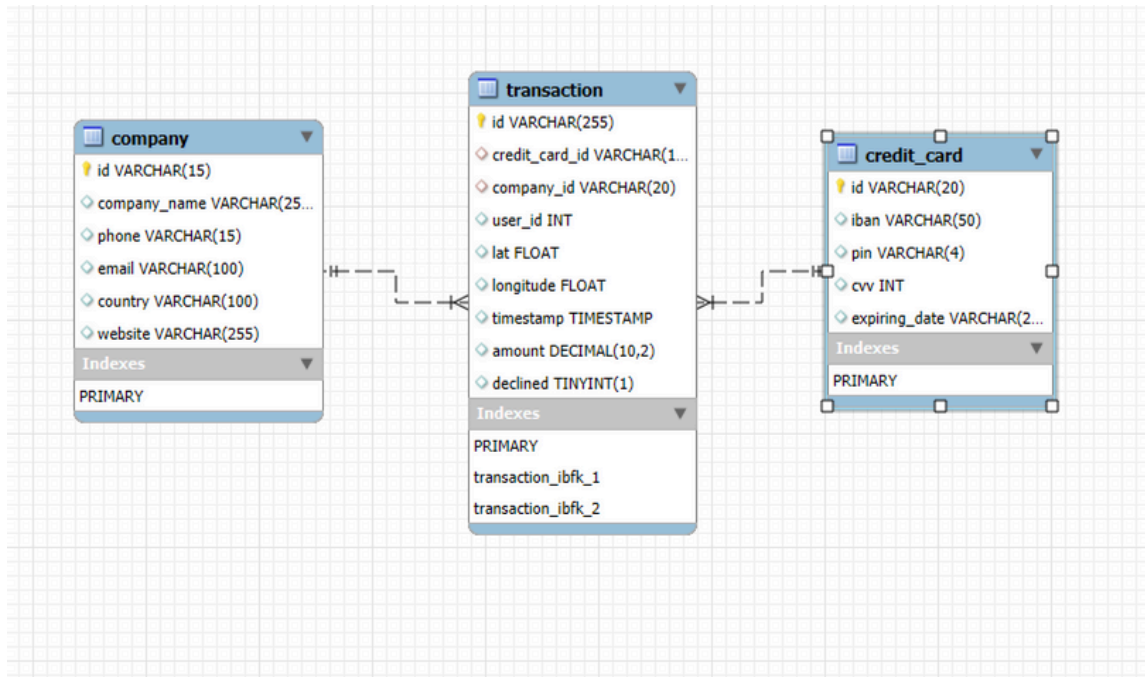




Sprint 3 - Nivel 3

Ejercicio 1

La próxima semana 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:



Agregar columna "fecha_actual" a la tabla credit_card

```
3 • ALTER TABLE credit_card
4 ADD fecha_actual DATE;
```

Output

Action Output

| # | Time | Action | Message |
|---|----------|---|--|
| 1 | 10:50:15 | ALTER TABLE credit_card ADD fecha_actual DATE | 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 |

Eliminar columna "website" de la tabla company

```
7 • SELECT * FROM company;
8
9 • ALTER TABLE company
10 DROP COLUMN website;
```

| Output | | | |
|---------------|----------|---|--|
| Action Output | | | |
| # | Time | Action | Message |
| 1 | 12:51:08 | ALTER TABLE company DROP COLUMN website | 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 |

Crear tabla user

```
12 -- Creamos la tabla user
13
14 • CREATE INDEX idx_user_id ON transaction(user_id);
15
16 • CREATE TABLE IF NOT EXISTS user (
17     id INT PRIMARY KEY,
18     name VARCHAR(100),
19     surname VARCHAR(100),
20     phone VARCHAR(150),
21     email VARCHAR(150),
22     birth_date VARCHAR(100),
23     country VARCHAR(150),
24     city VARCHAR(150),
25     postal_code VARCHAR(100),
26     address VARCHAR(255),
27     FOREIGN KEY(id) REFERENCES transaction(user_id)
28 );
29
```

| Output | | | |
|---------------|----------|--|--|
| Action Output | | | |
| # | Time | Action | Message |
| 1 | 12:55:59 | CREATE INDEX idx_user_id ON transaction(user_id) | 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 |
| 2 | 12:56:03 | CREATE TABLE IF NOT EXISTS user (id INT PRIMARY KEY, name VARCHAR(100), ... | 0 row(s) affected |

Cargar los datos en la tabla user

```
295 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "261", "Violet", "Weber", "019-661-3744"
296 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "262", "Brett", "Kirby", "076-166-2169"
297 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "263", "Ima", "Hendricks", "065-953-879"
298 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "264", "Keiko", "Guerra", "034-741-6314"
299 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "265", "Chloe", "Keith", "022-178-1548"
300 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "266", "Aiko", "Chaney", "026-660-1876"
301 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "267", "Ocean", "Nelson", "079-481-2745"
302 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "268", "Clark", "Olson", "029-086-1867"
303 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "269", "Haley", "Fitzpatrick", "055-871"
304 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "270", "Elton", "Roberson", "096-325-514"
305 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "271", "Leandra", "Cherry", "089-285-70"
306 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "272", "Hedwig", "Gilbert", "064-204-87"
307 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "273", "Hilary", "Ferguson", "060-710-1"
308 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "274", "Jameson", "Hunt", "024-732-2321"
309 • INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "275", "Kenyon", "Hartman", "082-871-72"
310
311 • SET foreign_key_checks = 1;
312
```

| Output | | | |
|---------------|----------|---|-------------------|
| Action Output | | | |
| # | Time | Action | Message |
| 274 | 13:01:33 | INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) | 1 row(s) affected |
| 275 | 13:01:33 | INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) | 1 row(s) affected |
| 276 | 13:01:33 | INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) | 1 row(s) affected |
| 277 | 13:01:33 | INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) | 1 row(s) affected |
| 278 | 13:01:33 | INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) | 1 row(s) affected |
| 279 | 13:01:33 | INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) | 1 row(s) affected |
| 280 | 13:01:33 | INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) | 1 row(s) affected |
| 281 | 13:01:33 | SET foreign_key_checks = 1 | 0 row(s) affected |

Renombrar columna email en tabla user

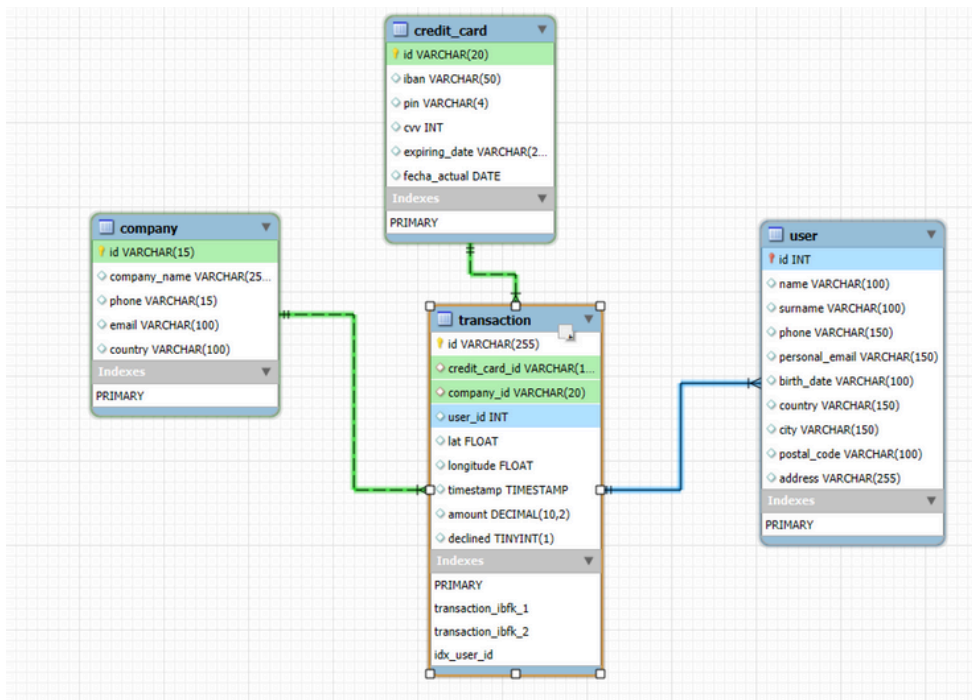
```
313 -- Renombrar columna email
314 • ALTER TABLE user
315 RENAME COLUMN email TO personal_email;
```

Output

Action Output

| # | Time | Action | Message |
|-----|----------|--|--|
| ✓ 1 | 13:07:43 | ALTER TABLE user RENAME COLUMN email TO personal_email | 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 |

La clave foranea con tabla user esta mal codificada en el archivo "estructura_datos_user"



Elimino la clave foranea erronea

```
322 -- Elimino clave foranea mal creada
323 • ALTER TABLE user
324 DROP FOREIGN KEY user_ibfk_1;
325
326
327
```

Output

Action Output

| # | Time | Action | Message |
|-----|----------|---|--|
| ✓ 1 | 11:45:58 | ALTER TABLE user DROP FOREIGN KEY user_ibfk_1 | 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 |

Creo la foranea correcta con tabla transaction

```
322 • ALTER TABLE transaction
323 ADD CONSTRAINT fk_user_id FOREIGN KEY (user_id) REFERENCES user(id);
324
```

Output

Action Output

| # | Time | Action | Message |
|-----|----------|---|--|
| ✓ 1 | 11:40:36 | ALTER TABLE transaction ADD CONSTRAINT fk_user_id FOREIGN KEY (user_id) REFERENCES user(id) | 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 |

Usuarios en la tabla transaction que no estan en la tabla user

```
29 • SELECT DISTINCT user_id
30 FROM transaction
31 WHERE user_id NOT IN (SELECT id FROM user);
32
```

| user_id |
|---------|
| 9999 |

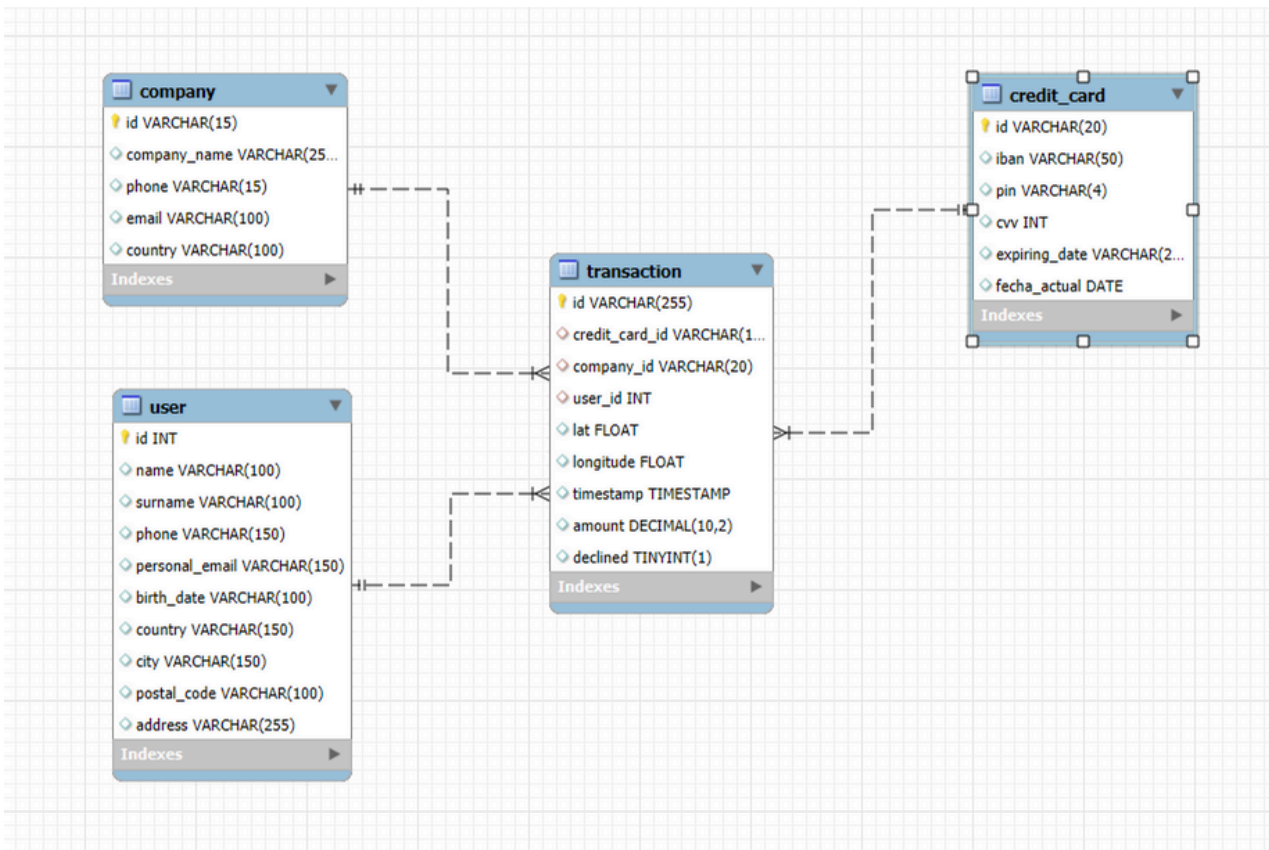
| # | Time | Action | Message |
|---|----------|---|-------------------|
| 1 | 14:03:06 | SELECT user_id FROM transaction WHERE NOT EXISTS (SELECT id FROM user WHERE user... | 1 row(s) returned |

Inserto el valor que no existe en la tabla user. Tambien podria haer optado por eliminar este valor.

```
33 • INSERT INTO user (id)
34 VALUES ('9999');
35
```

| # | Time | Action | Message |
|---|----------|-------------------------------------|-------------------|
| 1 | 09:04:31 | INSERT INTO user (id) VALUES (9999) | 1 row(s) affected |

Diagrama luego de las modificaciones en la base de datos



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 forma descendente en función de la variable ID de transacción.

```
--
3  -- Crear vista para Marketing
4  • CREATE VIEW InformeTecnico AS
5  SELECT company.company_name Compania, company.country Pais, transaction.id Transaction_ID, transaction.amount, user.name Nombre_Usuario, user.surname Apelli
6  FROM transaction
7  JOIN company ON company.id = transaction.company_id
8  JOIN credit_card ON credit_card.id = transaction.credit_card_id
9  JOIN user ON user.id = transaction.user_id
10 WHERE declined = '0'
11 ORDER BY transaction.id DESC;
12
13 • SELECT * FROM transactions.vistamarketing;
14
```

| # | Time | Action | Message | Duration / Fetch |
|---|----------|--|-------------------|------------------|
| 1 | 11:12:59 | CREATE VIEW InformeTecnico AS SELECT company.company_name Compania, company.count... | 0 row(s) affected | 0.015 sec |

Como decia el enunciado, agregue mas datos (pais de la compania, monto de la transaccion y que se haya realizado) para tener mas informacion relevante.

Resultado de la Vista generada

```
12
13 • SELECT * FROM transactions.InformeTecnico;
14
```

| Compania | Pais | Transaction_ID | amount | Nombre_Usuario | Apellido_Usuario | iban |
|------------------------------|---------|--------------------------------------|--------|----------------|------------------|--------------------------------|
| Nunc Interdum Incorporated | Germany | FE809ED4-2DB6-55AC-C915-929516E4646B | 219.83 | Molly | Gilliam | SE2813123487163628531121 |
| Nunc Interdum Incorporated | Germany | FD9CBCCD-8E1E-8DA1-4606-7E3A6F3A5A65 | 42.32 | Linus | Willis | KW9485332754781757886242955643 |
| Malesuada PC | Ireland | FD89D51B-AE8D-77DC-E450-B8083FBD3187 | 200.72 | Hilda | Levy | LT053237077744561475 |
| Neque Tellus Imperdiet Corp. | Ireland | FD2E8957-414B-BEEC-E9AD-59AA7A8A6290 | 78.29 | Hedwig | Gilbert | GE84848451582810541526 |
| Nunc Interdum Incorporated | Germany | FCE2AB9A-271D-2BDC-9E49-8DD92A373391 | 335.56 | Hakeem | Alford | MD1234119525145401270486 |

InformeTecnico 19 x

| # | Time | Action | Message |
|---|----------|---|---------------------|
| 1 | 11:14:14 | SELECT * FROM transactions.InformeTecnico LIMIT 0, 1000 | 500 row(s) returned |