

# IT ACADEMY



## Sprint 3 - EMC

En aquest sprint se simula una situació empresarial en la qual hauràs de realitzar diverses manipulacions a les taules d'una base de dades. A més, treballaràs amb índexs i vistes per optimitzar consultes i organitzar la informació.

Continuaràs treballant amb la base de dades que conté informació d'un marketplace, un entorn similar a Amazon on diverses empreses venen els seus productes a través d'un canal en línia. En aquesta activitat, començaràs a treballar amb dades relacionades amb targetes de crèdit.

Afegeix les taules al model segons correspongui:

- Nivell 1: Taula "credit\_card"
- Nivell 3 : Taula "user"

## Nivell 1

### Exercici 1

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.

```
1 CREATE TABLE credit_card (
2   id VARCHAR(20) PRIMARY KEY,
3   iban VARCHAR(34) NOT NULL UNIQUE,
4   pan VARCHAR(19) NOT NULL UNIQUE,
5   pin CHAR(4) NOT NULL,
6   cvv CHAR(3) NOT NULL,
7   expiring_date VARCHAR(10) NOT NULL
8 )
```

#	Time	Action	Message	Duration / Fetch
15124	10:24:44	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-9999', 'CcU-9999', 'CcU-9999', 'CcU-9999', 'CcU-9999', 'CcU-9999')	1 row(s) affected	0.000 sec
15125	10:24:44	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-9999', 'CcU-9999', 'CcU-9999', 'CcU-9999', 'CcU-9999', 'CcU-9999')	1 row(s) affected	0.016 sec
15126	10:24:44	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-9999', 'CcU-9999', 'CcU-9999', 'CcU-9999', 'CcU-9999', 'CcU-9999')	1 row(s) affected	0.000 sec

PASO 1: Crear tabla básica

PASO 2: Insertar datos de tarjetas del archivo dades\_introduir\_credit

PASO 3: Insertar tarjeta CcU-9999 para uso en transacciones

PASO 4: Establecer relación con tabla transaction

PASO 5: Verificar datos insertados.

Esta base de datos gestiona un marketplace donde diferentes

```

SPRINT_2  datos_introducir_sprint_credi  SQL File 24*  SQL File 25*
1  -- Insertamos datos de credit_card
2  13 Execute the selected portion of the script or everything, if there is no selection (e) VALUES ('CcU-2938', 'TR381958312213576817638661', '5424465566813633', '3257',
3  4 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-2945', '0026854763748537475216568689', '5142423821948828', '9088',
4  5 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-2952', '8G451VQJ52718925686255', '4556 453 55 5287', '4598', '43
5  6 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-2959', 'C07242477244335841535', '372461377349375', '3583', '660'
6  7 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-2966', '8072L47Q15627628377363', '448566 886747 7265', '4988', '
7  8 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-2973', 'PT87886228135892429456346', '544 58654 54343 384', '8768
8  9 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-2980', 'DE39241881883886277136', '482480 71458495969', '5875', '5
9  10 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-2987', 'GE89681434837748781813', '3763 747687 76666', '2288', '7
10 11 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-2994', '8H6271442838866765294', '344283273252593', '7545', '595
11 12 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-3001', 'CY49887426654774581266832118', '511722 924833 2244', '95
12 13 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-3008', 'LU98721669361619238', '4485744464433884', '1856', '748'
13 14 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-3015', 'PS119398216295715968342456821', '3784 662233 17389', '30
14 15 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-3022', '07818991638956897423121857', '5184 1379 4842 3951', '5
15 16 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-3029', 'A262317413982441418123739746', '9429 379566 77631', '970
16 17 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-3036', 'A239336892025842865843941994', '3768 451556 48766', '223
17 18 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-3043', 'TN6488143118514852179535', '455676 6437463635', '5969', '
18 19 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('CcU-3050', 'FR5167744369175836831854477', '4824807123722', '4834', '
Output
# Time Action Message Duration / Fetch
15124 10:24:44 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES (CcU-5957)... 1 row(s) affected 0.000 sec
15125 10:24:44 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES (CcU-5958)... 1 row(s) affected 0.016 sec
15126 10:24:44 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES (CcU-5959)... 1 row(s) affected 0.000 sec

```

```

1  SELECT * FROM transactions.credit_card;
2
3  INSERT INTO credit_card(id)
4  VALUES('CcU-9999');
Result Grid
# id iban pan pin cvv expiring_date
CcU-9999 0008 8623967258013540667124 34852582571261 9088 974 03/16/23
CcU-4856 TR37367258013540667124 34852582571261 9088 974 03/16/23
CcU-4849 SE28113129487163628531121 5223363812491314 9952 779 03/21/25
CcU-4842 SA2156708581957118818229 3774 636724 83250 4655 750 11/11/24
CcU-4835 PT3459217113176300132583 3723 677744 22550 1149 680 01/08/24
CcU-4828 SE1114301148367669464 4463252735942 2789 342 09/04/22
CcU-4821 LT231147305686466784 453987 7873842836 9000 867 07/15/20
CcU-4814 ME484528242784715228063 374471619343357 8790 124 12/19/20
Output
# Time Action Message Duration / Fetch
15027 11:55:02 alter table transaction ADD foreign key (credit_card_id) references credit_card(id) 100002 row(s) affected Records: 100002 Duplicates: 0 Warnings: 0 5.672 sec
15028 12:08:09 DESCRIBE credit_card 6 row(s) returned 0.016 sec / 0.000 sec

```

```

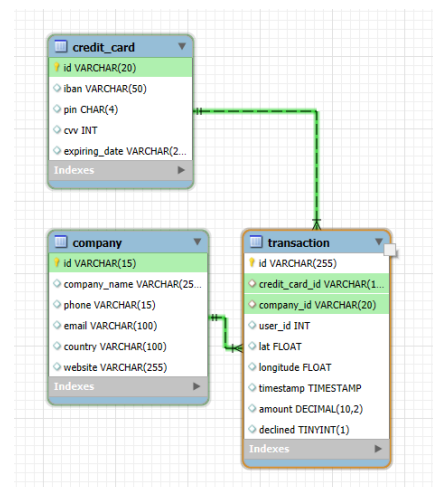
25 ('CcU-2945', '0026854763748537475216568689', '5142423821948828', '9088', '887', '08/24/23');
26
27
28 -- Verificación final
29 SELECT COUNT(*) as total_tarjetas FROM credit_card;
30
31
32
Result Grid
# total_tarjetas
1 5001
Output
# Time Action Message Duration / Fetch
15030 12:20:52 DESCRIBE credit_card 6 row(s) returned 0.016 sec / 0.000 sec
15031 12:21:09 SELECT COUNT(*) as total_tarjetas FROM credit_card 1 row(s) returned 0.063 sec / 0.000 sec
15032 12:21:38 SELECT COUNT(*) as total_tarjetas FROM credit_card 1 row(s) returned 0.000 sec / 0.000 sec

```

empresas realizan transacciones con tarjetas de crédito .

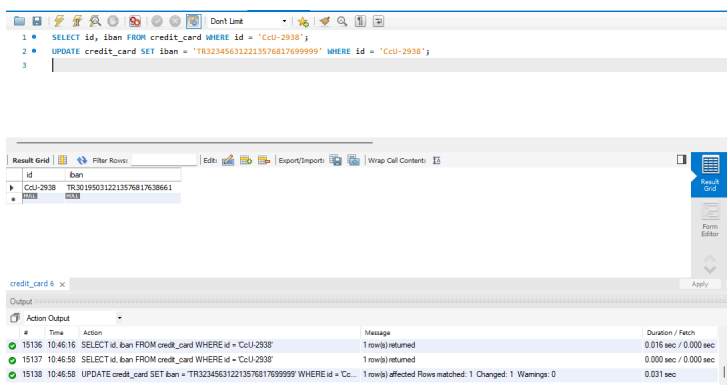
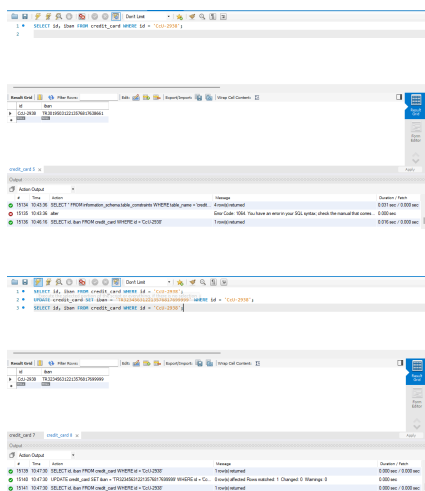
El sistema está formado por tres tablas principales que se relacionan entre sí:

- **company** : guarda la información de cada empresa participante, como su identificador, datos de contacto y ubicación.
- **credit\_card** : almacena los datos básicos de cada tarjeta (IBAN, PIN, CVV, fecha de expiración) y está vinculada con la empresa que la gestiona.
- **transaction** : registra cada operación comercial, conectando la tarjeta utilizada (credit\_card\_id), la empresa (company\_id) y el usuario correspondiente. También incluye el monto, la ubicación y el estado de la transacción.



## Exercici 2

El departament de Recursos Humans ha identificat un error en el número de compte associat a la targeta de crèdit amb ID CcU-2938. La informació que ha de mostrar-se per a aquest registre és: TR323456312213576817699999. Recorda mostrar que el canvi es va realitzar.



## Exercici 3

En la taula "transaction" ingressa una nova transacció 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

Don't Limit

```

40 • INSERT INTO transaction (id, credit_card_id, company_id, user_id, lat, longitude, amount, declined)
41 VALUES ('10881D1D-5B23-A76C-55EF-C568E49A99DD', 'CcU-9999', 'b-9999', '9999', 829.999, -117.999, 111.11, 0);
42 • SELECT * FROM transaction WHERE id = '10881D1D-5B23-A76C-55EF-C568E49A99DD';
43
44
45
46

```

Result Grid

	id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
▶	10881D1D-5B23-A76C-55EF-C568E49A99DD	CcU-9999	b-2222	9999	829.999	-117.999	NULL	111.11	0
*	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

transaction 13 x Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 15035	12:23:07	SELECT id, iban FROM credit_card WHERE id = 'CcU-2938'	1 row(s) returned	0.000 sec / 0.000 sec
✗ 15036	12:24:00	INSERT INTO transaction (id, credit_card_id, company_id, user_id, lat, longitude, am...	Error Code: 1062. Duplicate entry '10881D1D-5B23-A76C-55EF-C568E49A99DD' for ...	0.016 sec
✓ 15037	12:24:09	SELECT * FROM transaction WHERE id = '10881D1D-5B23-A76C-55EF-C568E49A9...	1 row(s) returned	0.000 sec / 0.000 sec

## Exercici 4

Des de recursos humans et sol·liciten eliminar la columna "pan" de la taula credit\_card. Recordar mostrar el canvi realitzat.

Don't Limit

```

35 VALUES ('10881D1D-5B23-A76C-55EF-C568E49A99DD', 'CcU-9999', 'b-9999', '9999', 829.999, -117.999, 111.11, 0);
36 • SELECT * FROM transaction WHERE id = '10881D1D-5B23-A76C-55EF-C568E49A99DD';
37
38 -----
39 • DESCRIBE credit_card;
40 • ALTER TABLE credit_card DROP COLUMN pan;
41 • DESCRIBE credit_card;

```

Result Grid

Field	Type	Null	Key	Default	Extra
id	varchar(20)	NO	PRI	NULL	
iban	varchar(50)	YES		NULL	
pin	char(4)	YES		NULL	
cvv	int	YES		NULL	
expiring_date	varchar(20)	YES		NULL	

Result 16 x Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	12:34:18	DESCRIBE credit_card	5 row(s) returned	0.000 sec / 0.000 sec

# Nivell 2

## Exercici 1

Elimina de la taula transaction el registre amb ID 000447FE-B650-4DCF-85DE-C7ED0EE1CAAD de la base de dades.

44

45 • `DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';`

46 • `SELECT * FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';`

Result Grid

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
000447FE-B650-4DCF-85DE-C7ED0EE1CAAD	CcS-5019	b-2370	438	41.5972	12.2218	2016-12-21 20:07:18	155.63	0
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

transaction 18 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	12:34:18	DESCRIBE credit_card	5 row(s) returned	0.000 sec / 0.000 sec
2	12:36:21	SELECT * FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';	1 row(s) returned	0.015 sec / 0.000 sec
3	12:37:10	SELECT * FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';	1 row(s) returned	0.015 sec / 0.000 sec

44

45 • `DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';`

46 • `SELECT * FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';`

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	12:39:13	DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';	0 row(s) affected	0.000 sec

45 • `DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';`

46 • `SELECT * FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';`

Result Grid

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

transaction 19 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	12:39:13	DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';	0 row(s) affected	0.000 sec
2	12:39:56	SELECT * FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';	0 row(s) returned	0.016 sec / 0.000 sec

## Exercici 2

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.

```

49
50 • CREATE VIEW VistaMarketing AS
51 SELECT
52     c.company_name AS Nom_companyia,
53     c.phone AS Telefon_contacte,
54     c.country AS Pais_residencia,
55     AVG(t.amount) AS Mitjana_compra
56 FROM company c JOIN transaction t
57 ON c.id = t.company_id
58 WHERE t.amount IS NOT NULL
59 GROUP BY c.id
60 ORDER BY Mitjana_compra DESC;
61 • SELECT * FROM VistaMarketing;

```

Output

#	Time	Action	Message	Duration / Fetch
4	12:47:00	SELECT * FROM VistaMarketing	Error Code: 1146. Table 'transactions.vistamarketing' doesn't exist	0.000 sec
5	12:47:13	CREATE VIEW VistaMarketing AS SELECT c.company_name AS Nom_companyi...	0 row(s) affected	0.031 sec

SCHMAS

Filter objects

- olympics
- sakila
- sys
- tienda\_online
- transactions
  - company
  - credit\_card
  - transaction
  - user
- Views
  - vistamarketing

Administration Schemas

Information

View: vistamarketing

Columns:

Column	Data Type
Nom_companyia	varchar(255)
Telefon_contacte	varchar(15)
Pais_residencia	varchar(100)
Mitjana_compra	decimal(14,6)

```

54     c.country AS Pais_residencia,
55     AVG(t.amount) AS Mitjana_compra
56 FROM company c JOIN transaction t
57 ON c.id = t.company_id
58 WHERE t.amount IS NOT NULL
59 GROUP BY c.id
60 ORDER BY Mitjana_compra DESC;
61 • SELECT * FROM VistaMarketing;

```

Result Grid

Nom_companyia	Telefon_contacte	Pais_residencia	Mitjana_compra
Ac Fermentum Incorporated	06 85 56 52 33	Germany	284.722543
Pretium Neque Corp.	07 77 48 55 28	Australia	276.158330
Urna Convalis Associates	06 01 24 77 04	United States	274.235011
At Associates	09 56 61 10 65	New Zealand	272.214870
Metus Vitae Associates	08 25 44 40 66	Australia	270.080965
Aliquet Diam Limited	02 76 61 47 46	United States	269.599181
Nec Lucius LLC	02 14 71 75 73	Norway	268.604837
Neque Tellus Incorporated	04 43 18 34 19	Ireland	267.850372
Tortor Nunc Commodo Chremy	05 35 42 77 16	United States	267.836085

VistaMarketing20

Output

#	Time	Action	Message	Duration / Fetch
5	12:47:13	CREATE VIEW VistaMarketing AS SELECT c.company_name AS Nom_companyi...	0 row(s) affected	0.031 sec
6	12:47:51	SELECT * FROM VistaMarketing	100 row(s) returned	1.219 sec / 0.000 sec

Object Info Session

## Exercici 3

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

SCHMAS

Filter objects

- olympics
- sakila
- sys
- tienda\_online
- transactions
  - company
  - credit\_card
  - transaction
  - user
- Views
  - vistamarketing

Administration Schemas

Information

View: vistamarketing

Columns:

Column	Data Type
Nom_companyia	varchar(255)
Telefon_contacte	varchar(15)
Pais_residencia	varchar(100)
Mitjana_compra	decimal(14,6)

```

57 ON c.id = t.company_id
58 WHERE t.amount IS NOT NULL
59 GROUP BY c.id
60 ORDER BY Mitjana_compra DESC;
61 • SELECT * FROM VistaMarketing;
62
63
64 • SELECT * FROM VistaMarketing WHERE Pais_residencia = 'Germany';

```

Result Grid

Nom_companyia	Telefon_contacte	Pais_residencia	Mitjana_compra
Ac Fermentum Incorporated	06 85 56 52 33	Germany	284.722543
Nunc Interdum Incorporated	05 18 15 48 13	Germany	259.319156
Convalis In Incorporated	06 66 57 29 50	Germany	257.745376
Ac Industries	09 34 65 40 60	Germany	255.147288
Rutrum Non Inc.	02 66 31 61 09	Germany	255.136927
Auctor Mauris Corp.	05 62 87 14 41	Germany	254.765518
Augue Foundation	06 88 43 15 63	Germany	253.505000
Aliquam PC	01 45 73 52 16	Germany	253.136923

VistaMarketing21

Output

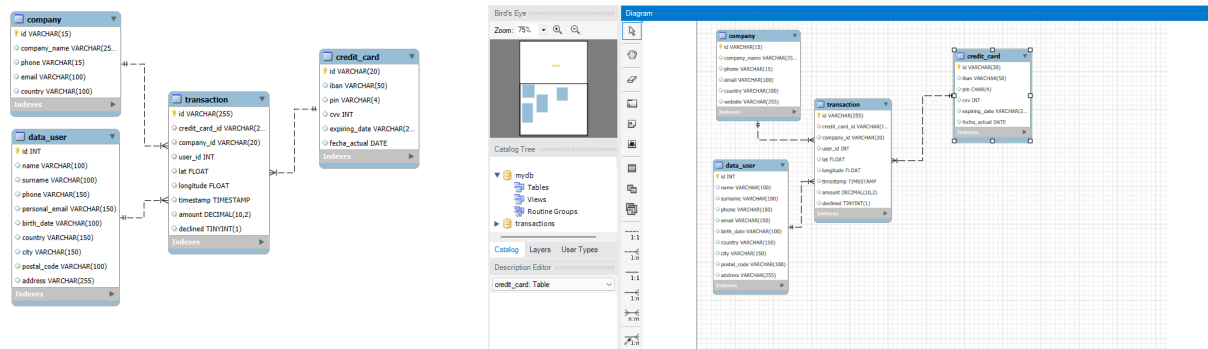
#	Time	Action	Message	Duration / Fetch
6	12:47:51	SELECT * FROM VistaMarketing	100 row(s) returned	1.219 sec / 0.000 sec
7	12:50:35	SELECT * FROM VistaMarketing WHERE Pais_residencia = 'Germany'	8 row(s) returned	0.781 sec / 0.000 sec

Object Info Session

# Nivell 3

## Exercici 1

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:



1. Renombré la tabla 'USER' a 'DATA\_USER' porque esta tabla ya existía desde la creación inicial de la base de datos.
2. Aseguré que el campo 'id' en data\_user fuera de tipo INT para permitir la relación con transaction.user\_id.
3. Agregué la columna 'fecha\_actual' a credit\_card para registrar cuándo se procesó cada tarjeta.
4. Poblé esta nueva columna con la fecha actual mediante la función CURDATE().
5. Finalmente, establecí la relación foreign key entre transaction.user\_id y data\_user.id para mantener la integridad referencial.

```
SPRINT_2  SQL File 24" x  datos introducir sprint3 user  data_user
67 -- 1. Renombrar tabla user a data_user
68 • RENAME TABLE user TO data_user;
69
70 -- 2. Asegurar que data_user.id sea INT para la relación
71 • ALTER TABLE data_user MODIFY id INT;
72
73 -- 3. Agregar columna fecha_actual a credit_card
74 • ALTER TABLE credit_card ADD COLUMN fecha_actual DATE;
75
76 -- 4. Poblar fecha_actual con fecha actual
77 • UPDATE credit_card SET fecha_actual = CURDATE();
78
79 -- 5. Establecer relación entre transaction y data_user
80 • ALTER TABLE transaction ADD FOREIGN KEY (user_id) REFERENCES data_user(id);
81
82 -- Verificar renombre de tabla
```

#	Time	Action	Message	Duration / Fetch
10	13:27:55	SELECT * FROM transactions data_user	0 row(s) returned	0.016 sec / 0.000 sec
11	13:28:41	SELECT * FROM transactions user	5000 row(s) returned	0.016 sec / 0.016 sec
12	13:31:34	DROP TABLE 'transactions'.'data_user'	0 row(s) affected	0.032 sec
13	13:32:45	rename table user to data_user	0 row(s) affected	0.047 sec
14	13:32:57	SELECT COUNT(*) FROM data_user	1 row(s) returned	0.032 sec / 0.000 sec
15	13:34:17	SELECT * FROM transactions credit_card	5001 row(s) returned	0.000 sec / 0.015 sec

84

85 -- Verificar modificación de tipo de dato

86 • DESCRIBE data\_user;

87

88 -- Verificar nueva columna en credit\_card

Result Grid

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

Result 29 x

Output

#	Time	Action	Message	Duration / Fetch
30	10:05:54	SELECT * FROM information_schema.table_constraints WHERE table_name = trans...	3 row(s) returned	0.015 sec / 0.000 sec
31	10:06:05	SELECT COUNT(*) AS total_usuarios FROM data_user	1 row(s) returned	0.015 sec / 0.000 sec
32	10:14:49	RENAME TABLE user TO data_user	Error Code: 1050. Table 'data_user' already exists	0.031 sec
33	10:18:13	DESCRIBE data_user	10 row(s) returned	0.015 sec / 0.000 sec

85 -- Verificar modificación de tipo de dato

86 • DESCRIBE data\_user;

87

88 -- Verificar nueva columna en credit\_card

89 • DESCRIBE credit\_card;

Result Grid

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

Result 30 x

Output

#	Time	Action	Message	Duration / Fetch
31	10:06:05	SELECT COUNT(*) AS total_usuarios FROM data_user	1 row(s) returned	0.015 sec / 0.000 sec
32	10:14:49	RENAME TABLE user TO data_user	Error Code: 1050. Table 'data_user' already exists	0.031 sec
33	10:18:13	DESCRIBE data_user	10 row(s) returned	0.015 sec / 0.000 sec
34	10:20:24	DESCRIBE credit_card	6 row(s) returned	0.000 sec / 0.000 sec



91 -- Verificar relación creada  
 92 • `SELECT * FROM information_schema.table_constraints`  
 93 `WHERE table_name = 'transaction' AND constraint_type = 'FOREIGN KEY';`  
 94  
 95 -- Verificar conteo de datos

	CONSTRAINT_CATALOG	CONSTRAINT_SCHEMA	CONSTRAINT_NAME	TABLE_SCHEMA	TABLE_NAME	CONSTRAINT_TYPE	ENFORCED
def		transactions	transaction_ibfk_1	transactions	transaction	FOREIGN KEY	YES
def		transactions	transaction_ibfk_2	transactions	transaction	FOREIGN KEY	YES
def		transactions	transaction_ibfk_3	transactions	transaction	FOREIGN KEY	YES

table\_constraints 31 x Read Only

Output

#	Time	Action	Message	Duration / Fetch
32	10:14:49	RENAME TABLE user TO data_user	Error Code: 1050. Table 'data_user' already exists	0.031 sec
33	10:18:13	DESCRIBE data_user	10 row(s) returned	0.015 sec / 0.000 sec
34	10:20:24	DESCRIBE credit_card	6 row(s) returned	0.000 sec / 0.000 sec
35	10:21:38	SELECT * FROM information_schema.table_constraints WHERE table_name = trans...	3 row(s) returned	0.016 sec / 0.000 sec

## Exercici 2

L'empresa també us demana 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.
- Assegureu-vos d'incloure informació rellevant de les taules que coneixereu i utilitzeu àlies per canviar de nom columnes segons calgui.

Mostra els resultats de la vista, ordena els resultats de forma descendent en funció de la variable ID de transacció.

**SCHEMAS**

Filter objects

- tienda\_online
  - transactions
    - company
    - credit\_card
    - data\_user
    - transaction
    - Views
      - informetecnico
      - vistamarketing
    - Stored Procedures
    - Functions

Administration Schemas

Information

**View: informetecnico**

**Columns:**

ID_transaccio	varchar(255)
Nom_usuari	varchar(100)
Cognom_usuari	varchar(100)
IBAN_targeta	varchar(50)
Nom_companyia	varchar(255)

```

98
99
100 • CREATE VIEW InformeTecnico AS
101 SELECT
102     t.id AS ID_transaccio,
103     u.name AS Nom_usuari,
104     u.surname AS Cognom_usuari,
105     cc.iban AS IBAN_targeta,
106     c.company_name AS Nom_companyia
107 FROM transaction t
108 JOIN data_user u ON t.user_id = u.id
109 JOIN credit_card cc ON t.credit_card_id = cc.id
110 JOIN company c ON t.company_id = c.id
111 ORDER BY t.id DESC;
112
113
  
```

**Output**

Action Output

#	Time	Action	Message	Duration / Fetch
1	10:32:14	CREATE VIEW InformeTecnico AS SELECT	t.id AS ID_transaccio, u.name AS No...	0 row(s) affected 0.109 sec

```

115
116 • SELECT * FROM InformeTecnico
117 ORDER BY ID_transaccio DESC;
118
119
120
  
```

**Result Grid**

ID_transaccio	Nom_usuari	Cognom_usuari	IBAN_targeta	Nom_companyia
FFFD31D6-9495-47CE-B54A-7D88E1CC274B	Bmrgli	Tprvmrc	XX794814451211289182490922	Turpis Company
FFFCF76D-ECF0-4985-A2D0-B2A7B75998FC	Dfied	Vlqjdl	XX636251701647892036676034	Amet Nulla Donec Corporation
FFFC9E8D-27C7-4ADE-98F2-7533EF4DF126	Securp	Faofvqfy	XX162677143304223631437567	Nunc Interdum Incorporated
FFFB270D-F53A-4D5D-9666-E5307C53CC84	Ggzpa	Uirzjuh	XX395114267082019952567052	Viverra Donec Foundation
FFFE3CE-234E-408C-A8EF-F9CAD577224A	Yshimq	Zpsjsleed	XX8845462156537570367941	Convallis In Incorporated
FFF9E178-6CD2-4DF9-9980-49AE068809B1	Jevepx	Xxcwzwmn	XX321405515711654384711481	Mus Aenean Eget Foundation
FFF867C9-17B5-4B1F-AFD9-F8023AAA449E	Fqlngd	Lvhfqyxi	XX278446342932680979729426	Cras Vehicula Aliquet Industries
FFF7042D-18C6-4DD0-823C-4D904A4C8F26	Njoraa	Egsquui	XX405009272572550082027209	Placerat LLP
FFF660D4-4244-47F6-9210-E5D1DCB99D80	Lopzaj	Itgryfay	XX63376659736627454015125	Pede Cum Ltd
FFF5C660-4441-436D-8D27-E6C53B618622	Gmnbnu	Oxdvhkll	XX237820256172646394016483	At Associates
FFF54F54-8439-41F0-BD02-F7332DC1ACAD	Gqcfyy	Mpifrltn	XX802723943240147612158718	Enim Condimentum Ltd
FFF42F7D-7A0D-46E2-AF72-5996903F8AA9	Ddkugq	Ycsbpnyu	XX926442301555195974199541	At Pede Corp.

InformeTecnico 34 x

**Output**

Action Output

#	Time	Action	Message	Duration / Fetch
4	10:38:23	SELECT * FROM transactions.informetecnico	100001 row(s) returned	1.422 sec / 0.047 sec
5	10:40:32	SELECT * FROM InformeTecnico ORDER BY ID_transaccio DESC	100001 row(s) returned	0.922 sec / 0.046 sec

```

121
122
123 • SHOW CREATE VIEW InformeTecnico;
124
125
126
  
```

**Result Grid**

View	Create View	character_set_client	collation_connection
informetecnico	CREATE ALGORITHM=UNDEFINED DEFINER='root'@'localhost' SQL SECURITY DEFINER VIEW 'informetecnico' AS select 't','id' ...	utf8mb4	utf8mb4_0900_ai_ci

Result 35 x

**Output**

Action Output

#	Time	Action	Message	Duration / Fetch
5	10:40:32	SELECT * FROM InformeTecnico ORDER BY ID_transaccio DESC	100001 row(s) returned	0.922 sec / 0.046 sec
6	11:42:08	SHOW CREATE VIEW InformeTecnico	1 row(s) returned	0.109 sec / 0.000 sec