

Tasca S3.01.Manipulació de taules

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.

```
6
7 CREATE TABLE IF NOT EXISTS credit_card(
8   id VARCHAR(255) NOT NULL,
9   iban VARCHAR(255) NOT NULL,
10  pan VARCHAR(255),
11  pin INT,
12  cvv INT,
13  expiring_date VARCHAR(20),
14  PRIMARY KEY (id));
15
16
17
18 SELECT *
19 FROM credit_card ;
20
21 UPDATE credit_card
22 SET expiring_date=STR_TO_DATE(expiring_date,'%m/%d/%y');
23
24 ALTER TABLE credit_card
25 CHANGE expiring_date expiring_date DATE NOT NULL;
26
27
28 desc credit_card;
29
30 -- Ejercicio 2 --
31 --
```

Output

#	Time	Action	Message	Duration / Fetch
1	17:23:26	ALTER TABLE transaction ADD INDEX idx_credit_card (credit_card_id)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.312 sec
2	17:23:36	SHOW COLUMNS FROM credit_card	Error Code: 1146. Table transactions.credit_card doesn't exist	0.000 sec
3	17:25:06	CREATE TABLE IF NOT EXISTS credit_card(id VARCHAR(255) NOT NU...	0 row(s) affected	0.000 sec

```
19
20 -- Insertamos datos de credit_card
21 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-2938', 'TR301950312213576817638661', '54244655668
22 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-2945', 'D026854763748537475216568689', '514242382
23 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-2952', 'R645IVQL52710525680255', '4556 453 55 528
24 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-2959', 'CR7242477244335841535', '372461377349375
25 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-2966', 'B672LKTQ15627628377363', '448566 886747 7
26 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-2973', 'PT87806228135892429456346', '544 58654 54
27 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-2980', 'DE392418818838662771136', '482480 71458459
28 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-2987', 'GE89681434837748781813', '3763 747687 766
29 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-2994', 'BH62714428368866765294', '344283273252593
30 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-3001', 'CY49807426654774581266832110', '511722 92
31 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-3008', 'LU587216693616119238', '4485744464433884'
32 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-3015', 'PS119380216295715968342456821', '3784 662
33 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-3022', 'GT9169516285856977423121857', '5164 1379
34 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-3029', 'AZ62317413982441418123739746', '3429 2795
35 INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES ('Ccu-3036', 'AZ39336802925842865843941994', '3768 4515
36
```

Output

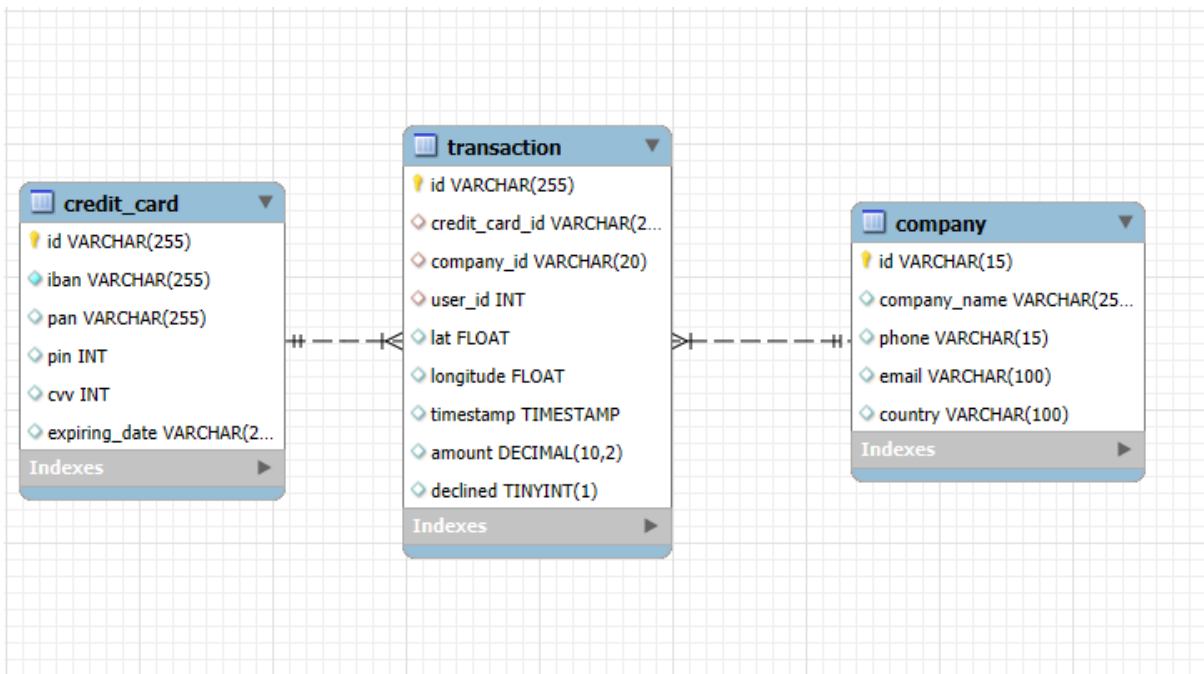
#	Time	Action	Message	Duration / Fetch
5127	13:15:22	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES (...)	1 row(s) affected	0.016 sec
5128	13:15:22	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES (...)	1 row(s) affected	0.000 sec
5129	13:15:22	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES (...)	1 row(s) affected	0.000 sec
5130	13:15:22	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES (...)	1 row(s) affected	0.000 sec
5131	13:15:22	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES (...)	1 row(s) affected	0.000 sec
5132	13:15:22	INSERT INTO credit_card (id, iban, pan, pin, cvv, expiring_date) VALUES (...)	1 row(s) affected	0.000 sec

```

15
16 • ALTER TABLE transaction
17 ADD CONSTRAINT fk_credit_card_id
18 FOREIGN KEY (credit_card_id)
19 REFERENCES credit_card(id)
20 ON DELETE CASCADE
21 ON UPDATE CASCADE;
22
23 • SELECT *
24 FROM credit_card ;
25
26 • desc credit_card;
27
28 -- Ejercicio 2 --
29 • SELECT *
--

```

Output				
Action Output				
#	Time	Action	Message	Duration / Fetch
5002	17:27:09	INSERT INTO credit_card (d, iban, pan, pin, cvv, expiring_date) VALU...	1 row(s) affected	0.000 sec
5003	17:27:09	INSERT INTO credit_card (d, iban, pan, pin, cvv, expiring_date) VALU...	1 row(s) affected	0.000 sec
5004	17:27:09	INSERT INTO credit_card (d, iban, pan, pin, cvv, expiring_date) VALU...	1 row(s) affected	0.000 sec
5005	17:27:29	SELECT * FROM credit_card	5000 row(s) returned	0.000 sec / 0.000 sec
5006	17:27:39	desc credit_card	6 row(s) returned	0.000 sec / 0.000 sec
5007	17:28:30	ALTER TABLE transaction ADD CONSTRAINT fk_credit_card_id FOR...	100000 row(s) affected Records: 100000 Duplicates: 0 Warnings: 0	0.969 sec



La base de datos sigue un modelo relacional. La tabla principal es *transaction*, que se relaciona con la tabla *company* en una relación de 1=N y con la tabla *credit_card* en una relación de 1=N.

En la tabla *company* se encuentra la información de empresas como el nombre, país y métodos de contacto.

En la tabla *transaction* encontramos la información de las propias transacciones como la empresa que las ha realizado, el valor total, la ubicación y la fecha en que se realizaron.

En la tabla *credit_card* se encuentra la información de las tarjetas de crédito con las que se realizan las transacciones como el iban de la cuenta bancaria a la que está asociada esa tarjeta, el pin y el cvv.

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.

```
37
38 • UPDATE credit_card
39 SET iban = 'TR323456312213576817699999'
40 WHERE id = 'CcU-2938';
41 -- Ejercicio 3 --
42
```

Output:

#	Time	Action	Message
1	10:22:23	UPDATE credit_card SET iban = 'TR323456312213576817699999' WHERE id = 'CcU-2938'	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0

```
29 • SELECT *
30 FROM credit_card
31 WHERE id = 'CcU-2938';
32
33 • UPDATE credit_card
34 SET iban = 'TR323456312213576817699999'
35 WHERE id = 'CcU-2938';
--
```

Result Grid

id	iban	pan	pin	cvv	expiring_date
CcU-2938	TR323456312213576817699999	5424465566813633	3257	984	10/30/22

credit_card 6 x

Output:

#	Time	Action	Message	Duration / Fetch
5006	17:27:39	desc credit_card	6 row(s) returned	0.000 sec / 0.000 sec
5007	17:28:30	ALTER TABLE transaction ADD CONSTRAINT fk_credit_card_id FOR...	100000 row(s) affected Records: 100000 Duplicates: 0 Warnings: 0	0.969 sec
5008	17:33:36	SELECT * FROM credit_card	5000 row(s) returned	0.000 sec / 0.000 sec
5009	17:34:28	SELECT * FROM credit_card WHERE id = 'CcU-2938'	1 row(s) returned	0.016 sec / 0.000 sec
5010	17:34:37	UPDATE credit_card SET iban = 'TR323456312213576817699999' W...	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.000 sec
5011	17:34:41	SELECT * FROM credit_card WHERE id = 'CcU-2938'	1 row(s) returned	0.000 sec / 0.000 sec

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

```
37 • SET FOREIGN_KEY_CHECKS=0;
38 • INSERT INTO transaction (id,credit_card_id,company_id,user_id,lat,longitude,amount,declined)
39 VALUES ('108B1D1D-5B23-A76C-55EF-C568E49A99DD','CcU-9999','b-9999',9999,'829.999','-117.999','111.11',0);
40
41 • SELECT *
42 FROM transaction
43 WHERE id='108B1D1D-5B23-A76C-55EF-C568E49A99DD';
44 -- Ejercicio 4--
45 • SET FOREIGN_KEY_CHECKS=0;
46
47 • ALTER TABLE credit_card DROP COLUMN pan;
48
49 -- NIVELL 2 --
50
51 -- Ejercicio 1 --
52 -- Explicar el cambio en word
53 • ALTER TABLE credit_card DROP CONSTRAINT credit_card_ibfk_1;
54 • ALTER TABLE credit_card
-- -- CONSTRAINT credit_card_ibfk_1 FOREIGN KEY (credit_card_id) REFERENCES credit_card (credit_card_id);
```

Output :

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 5009	17:34:28	SELECT * FROM credit_card WHERE id = 'CcU-2938'	1 row(s) returned	0.016 sec / 0.000 sec
✓ 5010	17:34:37	UPDATE credit_card SET iban = 'TR323456312213576817699999' W...	1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0	0.000 sec
✓ 5011	17:34:41	SELECT * FROM credit_card WHERE id = 'CcU-2938'	1 row(s) returned	0.000 sec / 0.000 sec
✗ 5012	17:35:16	INSERT INTO transaction (id,credit_card_id,company_id,user_id,lat,lon...	Error Code: 1452. Cannot add or update a child row: a foreign key const...	0.015 sec
✗ 5013	17:35:44	INSERT INTO transaction (id,credit_card_id,company_id,user_id,lat,lon...	Error Code: 1452. Cannot add or update a child row: a foreign key const...	0.000 sec
✓ 5014	17:36:38	SET FOREIGN_KEY_CHECKS=0	0 row(s) affected	0.000 sec
Query Completed				

```

40
41 SELECT *
42 FROM transaction
43 WHERE id='10881D1D-5B23-A76C-55EF-C568E49A99DD';
44 -- Ejercicio 4--

```

Result Grid									
Filter Rows:									
Edit: Export/Import: Wrap Cell Content:									
id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined	
10881D1D-5B23-A76C-55EF-C568E49A99DD	CdU-9999	b-9999	9999	829.999	-117.999	111.11	0		

Result Grid

Form Editor

Field Types

Query Stats

Execution Plan

transaction 10 x Apply Revert

Output

Action Output

#	Time	Action	Message	Duration / Fetch
5014	17:36:38	SET FOREIGN_KEY_CHECKS=0	0 row(s) affected	0.000 sec
5015	17:37:26	SELECT * FROM transaction WHERE id='10881D1D-5B23-A76C-55E...	0 row(s) returned	0.000 sec / 0.000 sec
5016	17:37:33	SELECT * FROM transaction WHERE id='10881D1D-5B23-A76C-55E...	0 row(s) returned	0.000 sec / 0.000 sec
5017	17:37:46	SELECT * FROM transaction WHERE id='10881D1D-5B23-A76C-55E...	0 row(s) returned	0.000 sec / 0.000 sec
5018	17:37:52	INSERT INTO transaction (id,credit_card_id,company_id,user_id,lat,lon...	1 row(s) affected	0.000 sec
5019	17:37:56	SELECT * FROM transaction WHERE id='10881D1D-5B23-A76C-55E...	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.

```
44 -- Ejercicio 4 --
45
46
47 • ALTER TABLE credit_card DROP COLUMN pan;
48
49 -- NIVELL 2 --
50
51 -- Ejercicio 1 --
52 -- Explicar el cambio en word
53 • ALTER TABLE credit_card DROP CONSTRAINT credit_card_ibfk_1;
54 • ALTER TABLE credit_card
55   ADD CONSTRAINT fk_credit_card_id
56   FOREIGN KEY (id)
57   REFERENCES transaction(credit_card_id)
58   ON DELETE CASCADE;
59
60 • SELECT *
61   FROM transaction
62   WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';
63
64 • DELETE FROM transaction
65   WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';
66
-- -- -- -- --
```

Output

#	Time	Action	Message	Duration / Fetch
5015	17:37:26	SELECT * FROM transaction WHERE id='108B1D1D-5B23-A76C-55E...	0 row(s) returned	0.000 sec / 0.000 sec
5016	17:37:33	SELECT * FROM transaction WHERE id='108B1D1D-5B23-A76C-55E...	0 row(s) returned	0.000 sec / 0.000 sec
5017	17:37:46	SELECT * FROM transaction WHERE id='108B1D1D-5B23-A76C-55E...	0 row(s) returned	0.000 sec / 0.000 sec
5018	17:37:52	INSERT INTO transaction (id,credit_card_id,company_id,user_id,lat,lon...	1 row(s) affected	0.000 sec
5019	17:37:56	SELECT * FROM transaction WHERE id='108B1D1D-5B23-A76C-55E...	1 row(s) returned	0.000 sec / 0.000 sec
5020	17:38:34	ALTER TABLE credit_card DROP COLUMN pan	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.031 sec

Query Completed

```
46
47 • ALTER TABLE credit_card DROP COLUMN pan;
48 • SHOW COLUMNS FROM credit_card;
49 -- NIVELL 2 --
50
51 -- Ejercicio 1 --
-- -- -- -- --
```

Result Grid

Field	Type	Null	Key	Default	Extra
id	varchar(255)	NO	PRI	NULL	
iban	varchar(255)	NO		NULL	
pin	int	YES		NULL	
cvv	int	YES		NULL	
expiring_date	varchar(20)	YES		NULL	

Result 11

Output

#	Time	Action	Message	Duration / Fetch
5016	17:37:33	SELECT * FROM transaction WHERE id='108B1D1D-5B23-A76C-55E...	0 row(s) returned	0.000 sec / 0.000 sec
5017	17:37:46	SELECT * FROM transaction WHERE id='108B1D1D-5B23-A76C-55E...	0 row(s) returned	0.000 sec / 0.000 sec
5018	17:37:52	INSERT INTO transaction (id,credit_card_id,company_id,user_id,lat,lon...	1 row(s) affected	0.000 sec
5019	17:37:56	SELECT * FROM transaction WHERE id='108B1D1D-5B23-A76C-55E...	1 row(s) returned	0.000 sec / 0.000 sec
5020	17:38:34	ALTER TABLE credit_card DROP COLUMN pan	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.031 sec
5021	17:39:10	SHOW COLUMNS FROM 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.

```
57
58 • DELETE FROM transaction
59 WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD';
60
61 -- Ejercicio 2 --
62
63 • CREATE VIEW VistaMarketing AS
64 SELECT c.company_name,c.phone,c.country,AVG(t.amount) AS 'Media de compras'
65 FROM company c
66 JOIN transaction t
67 ON c.id = t.company_id
68 GROUP BY t.company_id
69 ORDER BY 'Media de compras' DESC ;
70
71 • SELECT *
72 FROM VistaMarketing;
73 -- Ejercicio 3 --
74
75 • SELECT *
76 FROM VistaMarketing
77 WHERE country = 'Germany';
78
```

Output				
Action Output				
#	Time	Action	Message	Duration / Fetch
5018	17:37:52	INSERT INTO transaction (id,credit_card_id,company_id,user_id,lat,lon...	1 row(s) affected	0.000 sec
5019	17:37:56	SELECT * FROM transaction WHERE id='108B1D1D-5B23-A76C-55E...	1 row(s) returned	0.000 sec / 0.000 sec
5020	17:38:34	ALTER TABLE credit_card DROP COLUMN pan	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.031 sec
5021	17:39:10	SHOW COLUMNS FROM credit_card	5 row(s) returned	0.000 sec / 0.000 sec
5022	17:40:12	SELECT * FROM transaction WHERE id = '000447FE-B650-4DCF-85D...	1 row(s) returned	0.016 sec / 0.000 sec
5023	17:40:18	DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE...	1 row(s) affected	0.016 sec

52
53
54 • **SELECT ***
55 **FROM transaction**
56 **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 13 x

Output

Action Output

#	Time	Action	Message	Duration / Fetch
5019	17:37:56	SELECT * FROM transaction WHERE id='108B1D1D-5B23-A76C-55E...	1 row(s) returned	0.000 sec / 0.000 sec
5020	17:38:34	ALTER TABLE credit_card DROP COLUMN pan	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.031 sec
5021	17:39:10	SHOW COLUMNS FROM credit_card	5 row(s) returned	0.000 sec / 0.000 sec
5022	17:40:12	SELECT * FROM transaction WHERE id = '000447FE-B650-4DCF-85D...	1 row(s) returned	0.016 sec / 0.000 sec
5023	17:40:18	DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE...	1 row(s) affected	0.016 sec
5024	17:40:37	SELECT * FROM transaction WHERE id = '000447FE-B650-4DCF-85D...	0 row(s) returned	0.000 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.


```

62
63 • CREATE VIEW VistaMarketing AS
64 SELECT c.company_name,c.phone,c.country,ROUND(AVG(t.amount),2) AS 'Media de compras'
65 FROM company c
66 JOIN transaction t
67 ON c.id = t.company_id
68 WHERE declined = 0
69 GROUP BY t.company_id
70 ORDER BY 'Media de compras' DESC ;
71
72 • SELECT *
73 FROM VistaMarketing;
74 -- Ejercicio 3 --
75
76 • SELECT *
77 FROM VistaMarketing
78 WHERE country = 'Germany';
79
80
81
82
83 -- NIVELL 3 --
84
85

```

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	20:23:45	CREATE VIEW VistaMarketing AS SELECT c.comp...	Error Code: 1050. Table 'VistaMarketing' already exists	0.000 sec
2	20:24:13	drop view VistaMarketing	0 row(s) affected	0.016 sec
3	20:24:20	CREATE VIEW VistaMarketing AS SELECT c.comp...	0 row(s) affected	0.000 sec

71

72 • **SELECT ***

73 **FROM VistaMarketing;**

74 -- Ejercicio 3 --

75

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	company_name	phone	country	Media de compras
▶	Eget Tincidunt Dui Institute	05 35 93 32 44	Netherlands	254.62
	Neque Tellus Imperdiet Corp.	09 15 42 22 11	Ireland	263.86
	Fusce Corp.	08 14 97 58 85	United States	265.12
	Mus Aenean Eget Foundation	06 25 15 52 43	Sweden	256.00
	Aliquam Iaculis Lacus Corp.	04 43 07 91 26	Belgium	260.20
	Lorem Ipsum Dolor Corp.	09 03 14 76 02	Sweden	259.17
	Amet Luctus Vulputate Foundation	03 18 54 24 19	Canada	258.46
	Nulla Integer Vulputate Corp.	04 57 50 84 48	Sweden	262.28
	Auctor Mauris Corp.	05 62 87 14 41	Germany	254.68
	Euismod Mauris Institute	02 13 69 54 85	Belgium	257.34
	Pede Cum Ltd	07 62 26 48 38	Norway	255.39
	Donec Fringilla PC	01 51 58 14 44	France	256.98
	Justo Eu Arcu Ltd	08 42 56 71 52	Italy	256.97
	Lacus Quisque Associates	06 26 86 55 77	United States	262.88
	Dolor Vitae Limited	06 53 60 43 60	France	264.17
	Nunc Ac PC	03 53 62 76 95	Sweden	255.52
	Sed Est Corp.	04 58 02 37 91	Canada	262.40
	Mauris Institute	05 29 60 36 87	Sweden	255.87
	Ac Fermentum Incorporated	06 85 56 52 33	Germany	284.91
	Nunc Interdum Incorporated	05 18 15 48 13	Germany	259.32
	Non Justo Corp.	09 30 54 14 44	Sweden	260.70
	Non Magna LLC	06 71 73 13 17	United Kingdom	255.65
	A Institute	03 34 91 68 65	Belgium	247.85
	Turnis Company	09 69 48 65 52	Netherlands	261.53

taMarketing 1 x

Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
✖ 1	20:23:45	CREATE VIEW VistaMarketing AS SELECT c.com...	Error Code: 1050. Table 'VistaMarketing' already exi...	0.000 sec
✔ 2	20:24:13	drop view VistaMarketing	0 row(s) affected	0.016 sec
✔ 3	20:24:20	CREATE VIEW VistaMarketing AS SELECT c.com...	0 row(s) affected	0.000 sec
✔ 4	20:24:59	SELECT * FROM VistaMarketing	100 row(s) returned	0.234 sec / 0.000 sec

Añadir el round y el declined

Exercici 3

```

75
76 • SELECT *
77 FROM VistaMarketing
78 WHERE country = 'Germany';
79
80

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

	company_name	phone	country	Media de compras
▶	Auctor Mauris Corp.	05 62 87 14 41	Germany	254.68
	Ac Fermentum Incorporated	06 85 56 52 33	Germany	284.91
	Nunc Interdum Incorporated	05 18 15 48 13	Germany	259.32
	Aliquam PC	01 45 73 52 16	Germany	252.96
	Ac Industries	09 34 65 40 60	Germany	255.17
	Convallis In Incorporated	06 66 57 29 50	Germany	257.69
	Rutrum Non Inc.	02 66 31 61 09	Germany	255.14
	Augue Foundation	06 88 43 15 63	Germany	253.56

VistaMarketing 2 x Read Only

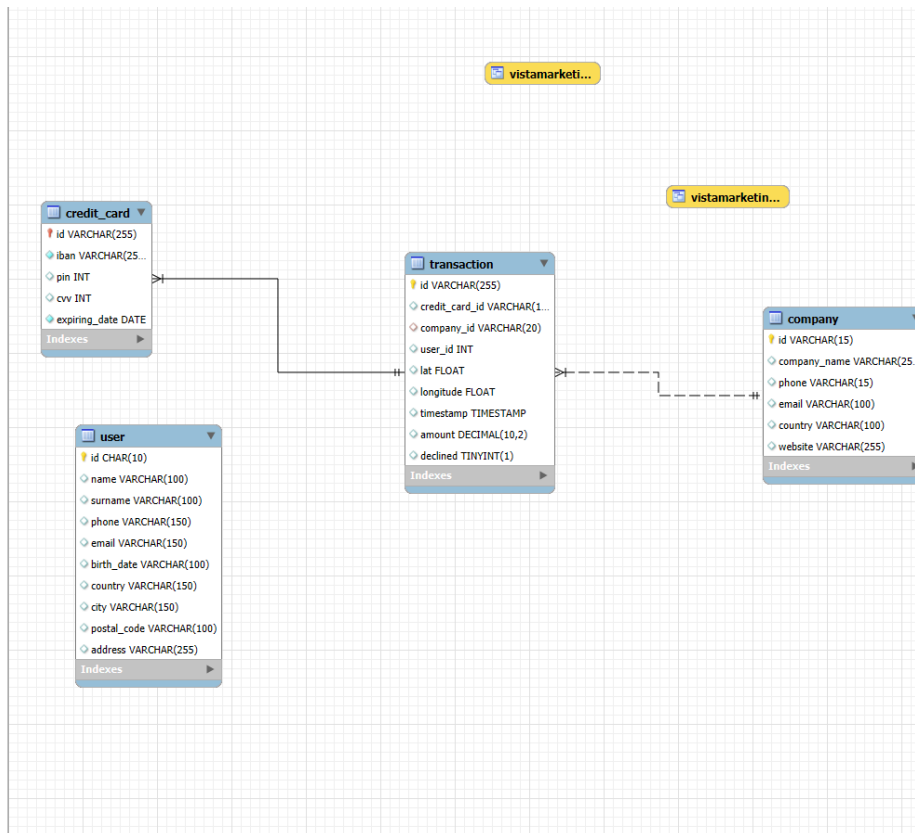
Output

Action Output

#	Time	Action	Message	Duration / Fetch
✗	1 20:23:45	CREATE VIEW VistaMarketing AS SELECT c.com...	Error Code: 1050. Table 'VistaMarketing' already exi...	0.000 sec
✓	2 20:24:13	drop view VistaMarketing	0 row(s) affected	0.016 sec
✓	3 20:24:20	CREATE VIEW VistaMarketing AS SELECT c.com...	0 row(s) affected	0.000 sec
✓	4 20:24:59	SELECT * FROM VistaMarketing	100 row(s) returned	0.234 sec / 0.000 sec
✓	5 20:25:59	SELECT * FROM VistaMarketing WHERE country ...	8 row(s) returned	0.156 sec / 0.000 sec

NIVELL 3

Exercici 1



```

1 CREATE TABLE IF NOT EXISTS user (
2     id CHAR(10) PRIMARY KEY,
3     name VARCHAR(100),
4     surname VARCHAR(100),
5     phone VARCHAR(150),
6     email VARCHAR(150),
7     birth_date VARCHAR(100),
8     country VARCHAR(150),
9     city VARCHAR(150),
10    postal_code VARCHAR(100),
11    address VARCHAR(255)
12 );

```

#	Time	Action	Message	Duration / Fetch
1	10:32:08	ALTER VIEW VistaMarketing AS SELECT c.company_name,c.phone,c.cou...	0 row(s) affected	0.015 sec
2	10:32:41	SELECT * FROM VistaMarketing LIMIT 0, 50000	8 row(s) returned	0.063 sec / 0.000 sec
3	10:44:01	CREATE TABLE IF NOT EXISTS user (id CHAR(10) PRIMARY KEY, name...	0 row(s) affected	0.031 sec

```

1 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "151", "Meg
2 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "152", "Hak
3 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "153", "Kee
4 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "154", "Coo
5 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "155", "Jos
6 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "156", "Rem
7 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "157", "Phi
8 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "158", "Fat
9 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "159", "Kyl
10 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "160", "Lae
11 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "161", "Nor
12 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "162", "Fra
13 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "163", "Den
14 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "164", "Pre
15 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "165", "Nor
16 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "166", "Mat
17 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "167", "She
18 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "168", "Don
19 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "169", "Lin
20 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "170", "Wil
21 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "171", "Gar
22 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "172", "Yok
23 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "173", "Ber
24 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "174", "Ama
25 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "175", "Bre
26 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "176", "Luc
27 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "177", "Lis
28 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "178", "Gui
29 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "179", "Stu
30 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "180", "Ame
31 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "181", "Ker
32 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "182", "Dan
33 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "183", "Ger
34 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "184", "Ull
35 INSERT INTO user (id, name, surname, phone, email, birth_date, country, city, postal_code, address) VALUES ( "185", "Mol

```

#	Time	Action	Message	Duration / Fetch
4998	10:45:04	INSERT INTO user (id, name, surname, phone, email, birth_date, country, c...	1 row(s) affected	0.000 sec
4999	10:45:04	INSERT INTO user (id, name, surname, phone, email, birth_date, country, c...	1 row(s) affected	0.000 sec
5000	10:45:04	INSERT INTO user (id, name, surname, phone, email, birth_date, country, c...	1 row(s) affected	0.000 sec
5001	10:45:04	INSERT INTO user (id, name, surname, phone, email, birth_date, country, c...	1 row(s) affected	0.000 sec
5002	10:45:04	INSERT INTO user (id, name, surname, phone, email, birth_date, country, c...	1 row(s) affected	0.000 sec
5003	10:45:04	INSERT INTO user (id, name, surname, phone, email, birth_date, country, c...	1 row(s) affected	0.000 sec

Primero creo la tabla 'user' y le cargo los datos usando los archivos adjuntos en el ejercicio.

Cambio el nombre de la tabla para que coincida con el de la imagen y cambio el tipo de variable que es 'id' a INT para que sea posible crear la llave foránea que conectará esta tabla con la tabla 'transaction'.

Creo la llave foránea .

Añadir a la tabla 'credit_card' la columna 'fecha_actual' ya que antes no existía y como no tiene datos hago que ponga la fecha actual por defecto a la hora de añadir los datos a la tabla si no se especifica fecha.

Elimino la columna 'website' de la tabla 'company'

Ahora que la estructura de la tabla es la misma lo que hago es revisar que todos los tipos de variables coincidan con los de la foto y cambiar los que no lo hacen.

Cambio el nombre de la columna 'email' para que coincida con la imagen.

```
86 • RENAME TABLE user TO data_user;
87
88 • ALTER TABLE data_user CHANGE id INT NOT NULL;
89
90 • ALTER TABLE transaction
91 ADD CONSTRAINT user_id_fk
92 FOREIGN KEY (user_id)
93 REFERENCES data_user(id)
94 ON DELETE CASCADE
95 ON UPDATE CASCADE;
96
97 • ALTER TABLE credit_card CHANGE id VARCHAR(20);

Output
# Time Action Message Duration / Fetch
110130 20:36:17 SET FOREIGN_KEY_CHECKS=0 0 row(s) affected 0.000 sec
110131 20:36:23 INSERT INTO transaction (id,credit_card_id,company_id,user_id,lat,longitude,amount,declined) VALUES ('10081D1D-5B23-A76C-55EF-C568E49A9DD' for key 'transaction.PRIMARY' 0 row(s) affected 0.000 sec
110132 20:36:28 ALTER TABLE credit_card DROP COLUMN pan 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.016 sec
110133 20:36:32 DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD' 0 row(s) affected 0.000 sec
110134 20:38:15 RENAME TABLE user TO data_user 0 row(s) affected 0.016 sec
110135 20:38:15 ALTER TABLE data_user CHANGE id INT NOT NULL 5000 row(s) affected Records: 5000 Duplicates: 0 Warnings: 0 0.062 sec
110136 20:39:14 ALTER TABLE transaction ADD CONSTRAINT user_id_fk FOREIGN KEY (user_id) REFERENCES data_user(id) ON DELETE CASCADE ON UPDAT... 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.204 sec

96
97 • ALTER TABLE credit_card
98 ADD COLUMN fecha_actual DATE ;
99 • UPDATE credit_card
100 SET fecha_actual = CURRENT_DATE
101 WHERE fecha_actual IS NULL;
102
103 • ALTER TABLE company DROP website;
104
105 • ALTER TABLE credit_card CHANGE id VARCHAR(20);
106
107 • ALTER TABLE transaction CHANGE credit_card_id credit_card_id VARCHAR(20);
108
109 • ALTER TABLE credit_card CHANGE iban VARCHAR(50);
110
111 • ALTER TABLE credit_card CHANGE pin VARCHAR(4);
112
113 • ALTER TABLE credit_card CHANGE expiring_date VARCHAR(20);
114
115 • ALTER TABLE company DROP website;

Output
# Time Action Message Duration / Fetch
110132 20:36:28 ALTER TABLE credit_card DROP COLUMN pan 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.016 sec
110133 20:36:32 DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD' 0 row(s) affected 0.000 sec
110134 20:38:15 RENAME TABLE user TO data_user 0 row(s) affected 0.016 sec
110135 20:38:15 ALTER TABLE data_user CHANGE id INT NOT NULL 5000 row(s) affected Records: 5000 Duplicates: 0 Warnings: 0 0.062 sec
110136 20:39:14 ALTER TABLE transaction ADD CONSTRAINT user_id_fk FOREIGN KEY (user_id) REFERENCES data_user(id) ON DELETE CASCADE ON UPDAT... 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.204 sec
110137 20:40:39 ALTER TABLE credit_card ADD COLUMN fecha_actual DATE 0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0 0.016 sec
110138 20:40:38 UPDATE credit_card SET fecha_actual = CURRENT_DATE WHERE fecha_actual IS NULL 5000 row(s) affected Rows matched: 5000 Changed: 5000 Warnings: 0 0.062 sec
```

```

102
103 ALTER TABLE company DROP website;
104
105 ALTER TABLE credit_card CHANGE id id VARCHAR(20);
106
107 ALTER TABLE transaction CHANGE credit_card_id credit_card_id VARCHAR(20);
108
109 ALTER TABLE credit_card CHANGE iban iban VARCHAR(50);
110
111 ALTER TABLE credit_card CHANGE pin pin VARCHAR(4);
112
113 ALTER TABLE credit_card CHANGE expiring_date expiring_date VARCHAR(20);
114
115 ALTER TABLE company DROP website;
116
117 ALTER TABLE data_user CHANGE email personal_email VARCHAR(150)
118 ;
119
120
121 -- Ejercicio 2--

```

Output

#	Time	Action	Message	Duration / Fetch
110133	20:36:32	DELETE FROM transaction WHERE id = '000447FE-B650-4DCF-85DE-C7ED0EE1CAAD'	0 row(s) affected	0.000 sec
110134	20:38:15	RENAME TABLE user TO data_user	0 row(s) affected	0.016 sec
110135	20:38:15	ALTER TABLE data_user CHANGE id id INT NOT NULL	5000 row(s) affected Records: 5000 Duplicates: 0 Warnings: 0	0.062 sec
110136	20:39:14	ALTER TABLE transaction ADD CONSTRAINT user_id_fk FOREIGN KEY (user_id) REFERENCES data_user(id) ON DELETE CASCADE ON UPDAT...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.204 sec
110137	20:40:38	ALTER TABLE credit_card ADD COLUMN fecha_actual DATE	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.016 sec
110138	20:40:38	UPDATE credit_card SET fecha_actual = CURRENT_DATE WHERE fecha_actual IS NULL	5000 row(s) affected Rows matched: 5000 Changed: 5000 Warnings: 0	0.062 sec
110139	20:40:53	ALTER TABLE company DROP website	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.015 sec

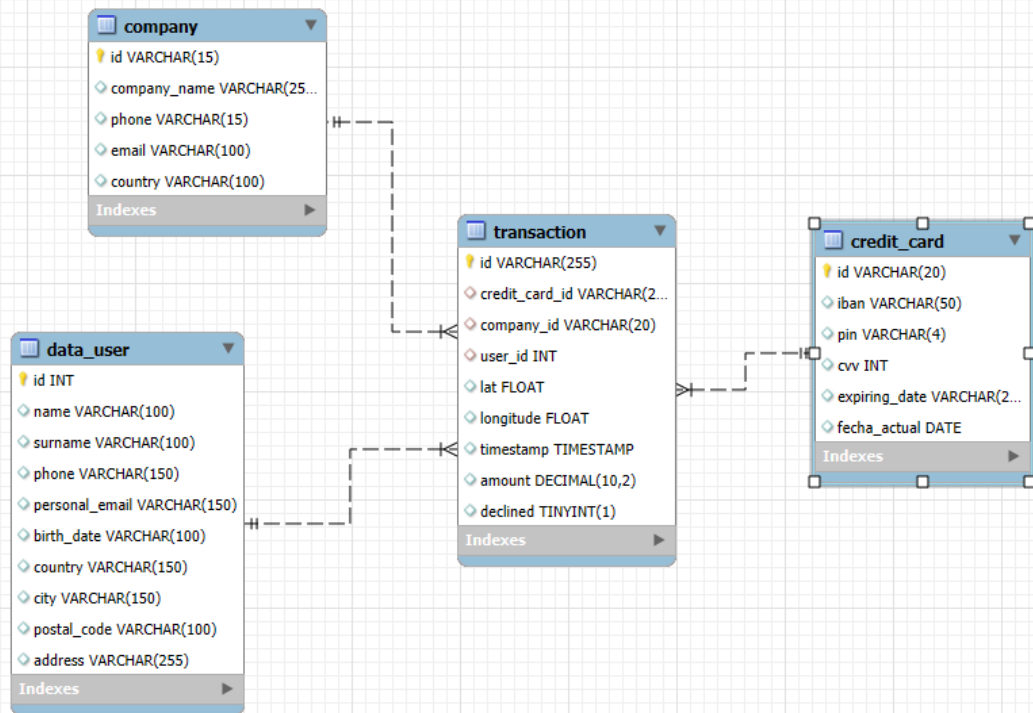
```

102
103 ALTER TABLE company DROP website;
104
105 ALTER TABLE credit_card CHANGE id id VARCHAR(20);
106
107 ALTER TABLE transaction CHANGE credit_card_id credit_card_id VARCHAR(20);
108
109 ALTER TABLE credit_card CHANGE iban iban VARCHAR(50);
110
111 ALTER TABLE credit_card CHANGE pin pin VARCHAR(4);
112
113 ALTER TABLE credit_card CHANGE expiring_date expiring_date VARCHAR(20);
114
115 ALTER TABLE data_user CHANGE email personal_email VARCHAR(150)
116 ;
117
118
119 -- Ejercicio 2--
120
121

```

Output

#	Time	Action	Message	Duration / Fetch
110139	20:40:53	ALTER TABLE company DROP website	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.015 sec
110140	20:41:30	ALTER TABLE credit_card CHANGE id id VARCHAR(20)	5000 row(s) affected Records: 5000 Duplicates: 0 Warnings: 0	0.047 sec
110141	20:41:30	ALTER TABLE transaction CHANGE credit_card_id credit_card_id VARCHAR(20)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.000 sec
110142	20:41:30	ALTER TABLE credit_card CHANGE iban iban VARCHAR(50)	5000 row(s) affected Records: 5000 Duplicates: 0 Warnings: 0	0.078 sec
110143	20:41:30	ALTER TABLE credit_card CHANGE pin pin VARCHAR(4)	5000 row(s) affected Records: 5000 Duplicates: 0 Warnings: 0	0.063 sec
110144	20:41:30	ALTER TABLE credit_card CHANGE expiring_date expiring_date VARCHAR(20)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.000 sec
110145	20:41:30	ALTER TABLE data_user CHANGE email personal_email VARCHAR(150)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.019 sec



vistamarketi...

informetecni...

Exercici 2

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•

```
CREATE VIEW InformeTecnico AS
SELECT t.id,d.name,d.surname,c.iban,c2.company_name
FROM transaction t
JOIN data_user d
ON t.user_id = d.id
JOIN credit_card c
ON t.credit_card_id = c.id
JOIN company c2
ON t.company_id = c2.id
GROUP BY t.id
ORDER BY t.id DESC;
```

Output

Action Output

#	Time	Action	Message	Duration / F...
11	20:22:26	SET FOREIGN_KEY_CHECKS=0	0 row(s) affected	0.016 sec
12	20:22:30	ALTER TABLE transaction ADD CONSTRAINT user_id_fk FOREIGN KEY (user_id) REFERENCES data_user(id) ON DELETE CASCADE ON UPDAT...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0	0.281 sec
13	20:27:33	SELECT * FROM transaction t JOIN data_user d ON t.user_id = d.id JOIN credit_card c ON t.credit_card_id = c.id JOIN company c2 ON t.company_id ...	99999 row(s) returned	0.016 sec / 0.
14	20:28:35	SELECT * FROM transaction t JOIN data_user d ON t.user_id = d.id JOIN credit_card c ON t.credit_card_id = c.id JOIN company c2 ON t.company_id ...	99999 row(s) returned	1.344 sec / 0.
15	20:29:53	SELECT t.id,d.name,d.surname,c.iban,c2.company_name FROM transaction t JOIN data_user d ON t.user_id = d.id JOIN credit_card c ON t.credit_car...	99999 row(s) returned	0.453 sec / 0.
16	20:30:28	CREATE VIEW InformeTecnico AS SELECT t.id,d.name,d.surname,c.iban,c2.company_name FROM transaction t JOIN data_user d ON t.user_id = d...	0 row(s) affected	0.015 sec

152
153
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•

```
SELECT *
FROM InformeTecnico;
```

Result Grid

Filter Rows:

Export:

Wrap Cell Contents:

Fetch rows:

#	id	name	surname	iban	company_name
1	FFFF031D6-9495-47CE-854A-7D88E1CC274B	Bmrglj	Tprvmrc	XX794814451211289182490922	Turpis Company
2	FFFC976D-ECF0-4985-A2D0-62A7B75998FC	Dfrld	Vlqcdj	XX636251701647892036676034	Amet Nulla Donec Corporation
3	FFFC9E80-27C7-4AD6-98F2-7533EF40F126	Securp	Faofvqfy	XX162677143304223631437567	Nunc Interdum Incorporated
4	FFFB7D00-F53A-4D5D-9666-E53D7C53C2B4	Ggqpa	Lirzjln	XX395114267082019952567052	Viverra Donec Foundation
5	FFFE9C3E-234E-408C-A8EF-F9CAD577224A	Yshmq	Zpsgleed	XX8845462155537570367941	Convallis In Incorporated
6	FFFE178-6CD2-4DF9-99D0-49AE068809B1	Jevepx	Xwovzwrm	XX321405515711654384711481	Mus Aenean Eget Foundation
7	FFFE7C9-1785-4B1F-AFD9-F8023AAA449E	Folrpd	Lvhfzyxi	XX278464342932680979729426	Cras Vehicula Aliquet Industries
8	FFF7042D-18C6-4DD0-823C-4D90A4ACBF26	Njoraa	Egsiqui	XX405009272572550082027209	Placerat LLP
9	FFF66D04-4244-47F6-9210-ESD1DCB99D80	Lopazj	Itgryfay	XX63376659736627454015125	Pede Cum Ltd
10	FFF5C660-4441-436D-8D27-E6C538618622	Gmnbrn	Oxdvhld	XX237820256172646394016483	At Associates
11	FFF54F54-8439-41F0-8DD2-F7332DC1ACAD	Gcfcfy	Mplfrltn	XX802723943240147612158718	Enim Condimentum Ltd
12	FFF42F7D-7A0D-46E2-AF72-5996903F8AA9	Ddkuqg	Ycbbpryu	XX926442301555195974199541	At Pede Corp.
13	FFF42620-1968-4A1F-69D7-27843CB097A5	Sjbrvp	Elnzdfj	XX395457232638959102336873	Amet Nulla Donec Corporation
14	FFF206B8-79D2-497C-8DCE-2EC63FE3E9AD	Vlcfryfs	Dkthghld	XX438989948222220717519935	Integer Mollis Corp.
15	FFF20FB4-9014-4AC3-8938-E31E7786C49A	Afjmt	Yahvmtok	XX148483552740443735712134	Ac Fermentum Incorporated
16	FFF20DF0-6D0F-4B48-8337-EE476513A96C	Gcabnq	Rsbhkgkg	XX401515215969396565954528	Pretium Neque Corp.
17	FFF1165-302A-46F8-85D1-11A80FEBDE65	Sxmbuj	Fofmhhyr	XX984089430672237986516070	Augue Foundation
18	FFFE526-6D03-43A2-845F-28985E864FF8	Fdnrlf	Duddooxt	XX321816115649671274181101	Cras Vehicula Aliquet Industries
19	FFFECAF8-63A8-4343-8E5A-5D3864605E9E	Vpphua	Uljkeiqh	XX835902643153268961071627	Enim Condimentum Ltd
20	FFFE3CCD-570E-4832-A549-851590ACE2F9	Tlrxr	Zrqkefve	XX271299628636232349308310	Sapien Nunc Pulvinar LLP
21	FFFE464-4990-49E5-837F-18E2DDC50765	Mplkkr	Cvkaqbgg	XX669765463980171165992580	Dui Cras Associates
22	FFED3451-EEFE-4EA1-884A-643C968C9589	Zysgdp	Pprhmopx	XX436742306265236220597816	Tristique Neque Venenatis Inst...
23	FFECBA07-4369-4603-88E6-39E612783CDB	Zlkgiv	Xacovscm	XX255104722606040277752468	Ut Semper Foundation
24	FFEF706B-71C64B-14343A-1A78774971C7	Bmrvhvi	Yelrvnfv	XX787064774827716480777689C7	Mit Crasam Fines Privatization

Output

Action Output

#	Time	Action	Message	Duration / F...
13	20:27:33	SELECT * FROM transaction t JOIN data_user d ON t.user_id = d.id JOIN credit_card c ON t.credit_card_id = c.id JOIN company c2 ON t.company_id ...	99999 row(s) returned	0.016 sec / 0.
14	20:28:35	SELECT * FROM transaction t JOIN data_user d ON t.user_id = d.id JOIN credit_card c ON t.credit_card_id = c.id JOIN company c2 ON t.company_id ...	99999 row(s) returned	1.344 sec / 0.
15	20:29:53	SELECT t.id,d.name,d.surname,c.iban,c2.company_name FROM transaction t JOIN data_user d ON t.user_id = d.id JOIN credit_card c ON t.credit_car...	99999 row(s) returned	0.453 sec / 0.
16	20:30:28	CREATE VIEW InformeTecnico AS SELECT t.id,d.name,d.surname,c.iban,c2.company_name FROM transaction t JOIN data_user d ON t.user_id = d...	0 row(s) affected	0.015 sec
17	20:31:20	SELECT * FROM InformeTecnico	99999 row(s) returned	0.484 sec / 0.
18	20:31:32	SELECT * FROM InformeTecnico	99999 row(s) returned	0.484 sec / 0.