Descarga los archivos CSV, estudiales y diseña una base de datos con un esquema de estrella que contenga, al menos 4 tablas

Nueva Base de datos:

```
transaction    transaction    company    user ✕

1 •   CREATE SCHEMA `nueva_db`;
2 •   USE nueva_db;
3
```

Output — Action Output

#	Time	Action	Message
✅	1 11:07:04	CREATE SCHEMA `nueva_db`	1 row(s) affected
✅	2 11:07:06	USE nueva_db	0 row(s) affected

Creo la tabla transactions (Fact table)

```
3
4 •  CREATE TABLE IF NOT EXISTS transactions(
5     id VARCHAR(50) PRIMARY KEY,
6     card_id VARCHAR(20),
7     business_id VARCHAR(20),
8     timestamp TIMESTAMP,
9     amount DECIMAL(10,2),
10    declined TINYINT(1),
11    product_ids VARCHAR(20),
12    user_id INT,
13    lat FLOAT,
14    longitude FLOAT);
15
16
```

Output — Action Output

#	Time	Action	Message	Duration / Fetch
⚠️	1 11:30:45	CREATE TABLE IF NOT EXISTS transactions(idVARCHAR(50) PRIMARY KEY, card_idV...	0 row(s) affected, 1 warning(s): 1681 Integer display width is deprecated and will be removed in a future relea...	0.031 sec

```
30 •  LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/transactions.csv'
31    INTO TABLE transactions
32    FIELDS TERMINATED BY ','
33    LINES TERMINATED BY '\n'
34    IGNORE 1 ROWS;
35
36
```

Output — Action Output

#	Time	Action	Message
⚠️	1 10:12:00	CREATE TABLE IF NOT EXISTS transactions(idVARCHAR(50) PRIMARY KEY, card_idVARCHAR(20), busi...	0 row(s) affected, 1 warning(s): 1681 Integer display width is deprecated and will be rem...
⚠️	2 10:12:15	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/transactions.csv' INTO T...	
✅	3 10:12:23	SELECT * FROM nueva_db.transactions LIMIT 0, 1000	588 row(s) returned

```sql
1 •   SELECT * FROM nueva_db.transactions;
```

id	card_id	business_id	timestamp	amount	declined	product_ids	user_id	lat	longitude
02C6201E-D90A-1859-B4EE-88D2986D3B02	CcU-2938	b-2362	28/08/2021 23:42	466.92	0	71, 1, 19	92	819,184,589,824	-125,275,561,984
0466A42E-47CF-8D24-FD01-C0B689713128	CcU-4219	b-2302	26/07/2021 07:29	49.53	0	47, 97, 43	170	-439,694,885,888	-1,175,251,835,904
063FBA79-99EC-66FB-29F7-25726D1764A5	CcU-2987	b-2250	06/01/2022 21:25	92.61	0	47, 67, 31, 5	275	-81,222,680,576	-129,049,879,552
0668296C-CDB9-A883-76BC-2E4C44F8C8AE	CcU-3743	b-2618	26/01/2022 02:07	394.18	0	89, 83, 79	265	-343,593,055,232	-100,555,928,064
06CD9AA5-9B42-D684-DDDD-A5E394FEBA99	CcU-2959	b-2346	26/10/2021 23:00	279.93	0	43, 31	92	337,381,445,632	158,298,210,304
07A46D48-31A3-7E87-65B9-0DA902AD109F	CcU-3225	b-2386	28/06/2021 21:11	340.87	1	47, 23	272	388,341,526,528	92,190,545,408
09DE92CE-6F27-2BB7-13B5-9385B2B3B8E2	CcU-3071	b-2298	11/05/2021 20:40	303.05	1	67, 7	275	711,705,612,288	105,756,752,896
0A476ED9-0C13-1962-F87B-D3563924B539	CcU-4359	b-2302	26/02/2022 20:33	430.49	0	29, 41, 11	221	-56,490,077,696	1,148,012,315,648
0BEB80B7-9D66-1707-CE4B-9DC7E71914B5	CcU-3141	b-2338	04/03/2022 14:54	288.81	1	19, 41, 29, 3	272	233,264,027,648	-136,036,868,096
0C7C3A33-9947-3BC1-846D-7BE3D0D17598	CcU-3309	b-2434	10/04/2021 20:58	103.44	1	89, 31	272	633,614,763,008	-686,666,633,216
0CE957A6-CCAA-2B7A-6839-8A4B1B324853	CcU-3435	b-2506	02/02/2022 07:29	428.69	1	83, 43, 73, 61	269	-693,537,422,336	-102,600,429,568
0DD2E608-5C9E-D1B3-4999-B99F43AD735A	CcU-2959	b-2234	17/04/2021 05:30	252.47	1	7, 47, 17	275	96,881,091,584	130,282,389,504
1017AA59-3D5F-7A4C-1992-D151A8D1FA0A	CcU-3701	b-2618	01/11/2021 01:02	447.11	0	37, 13	267	4,276,451,328	-1,015,540,074,496

transactions 1 ×

Output

#	Time	Action	Message	Duration
✓	1	10:35:15	SELECT * FROM nueva_db.transactions LIMIT 0, 1000	587 row(s) returned	0.000 se

Creo la tabla companies (Dimension table)

```sql
37 • ⊖  CREATE TABLE IF NOT EXISTS companies(
38       company_id VARCHAR(20) PRIMARY KEY,
39       company_name VARCHAR(25),
40       phone VARCHAR(30),
41       email VARCHAR(50),
42       country VARCHAR(50),
43       website VARCHAR(100)
44     );
45
```

Output

#	Time	Action	Message
✓	1	10:07:04	CREATE TABLE IF NOT EXISTS companies(company_id VARCHAR(20) PRIMARY KEY, compan...	0 row(s) affected

```sql
35 •  LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/companies.csv'
36    INTO TABLE companies
37    FIELDS TERMINATED BY ','
38    LINES TERMINATED BY '\n'
39    IGNORE 1 ROWS;
40
```

Output

#	Time	Action	Message	Duration
✓	9	10:26:06	SELECT * FROM nueva_db.transactions LIMIT 0, 1000	588 row(s) returned	0.000 se
⚠	10	10:26:37	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/companies.csv' INTO T...	100 row(s) affected, 21 warning(s): 1265 Data truncated for column 'company_name'...	0.000 se
✓	11	10:26:43	SELECT * FROM nueva_db.companies LIMIT 0, 1000	100 row(s) returned	0.000 se

```sql
1 •  SELECT * FROM nueva_db.companies;
```

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

company_id	company_name	phone	email	country	website
b-2222	Ac Fermentum Incorporated	06 85 56 52 33	donec.porttitor.tellus@yahoo.net	Germany	https://instagram.com/site
b-2226	Magna A Neque Industries	04 14 44 64 62	risus.donec.nibh@icloud.org	Australia	https://whatsapp.com/group/9
b-2230	Fusce Corp.	08 14 97 58 85	risus@protonmail.edu	United States	https://pinterest.com/sub/cars
b-2234	Convallis In Incorporated	06 66 57 29 50	mauris.ut@aol.couk	Germany	https://cnn.com/user/110
b-2238	Ante Iaculis Nec Foundati	08 23 04 99 53	sed.dictum.proin@outlook.ca	New Zealand	https://netflix.com/settings
b-2242	Donec Ltd	01 25 51 37 37	at.iaculis@hotmail.couk	Norway	https://nytimes.com/user/110
b-2246	Sed Nunc Ltd	02 62 64 73 48	nibh@yahoo.org	United Kingdom	https://cnn.com/one
b-2250	Amet Nulla Donec Corporat	07 15 25 14 74	mattis.integer.eu@protonmail.net	Italy	https://netflix.com/sub/cars
b-2254	Nascetur Ridiculus Mus In	06 26 87 61 84	suspendisse.dui@icloud.net	United States	https://ebay.com/sub
b-2258	Vestibulum Lorem PC	02 02 87 33 40	aenean.massa.integer@aol.net	Belgium	https://pinterest.com/sub/cars
b-2262	Gravida Sagittis LLP	03 81 28 33 97	turpis.vitae@google.ca	Sweden	https://naver.com/site
b-2266	Mus Aenean Eget Foundatio	06 25 15 52 43	mi.duis@hotmail.net	Sweden	https://instagram.com/group/9
b-2270	Dis Parturient Institute	05 36 29 78 74	purus@protonmail.org	Ireland	https://google.com/one
b-2274	Sed LLC	01 63 16 26 52	at@outlook.com	Belgium	https://reddit.com/fr
b-2278	Arcu LLP	06 46 04 41 45	dui@aol.ca	Norway	https://yahoo.com/sub
b-2282	Pretium Neque Corp.	07 77 48 55 28	eleifend.nec.malesuada@proton...	Australia	https://netflix.com/sub
b-2286	Fringilla LLC	08 29 15 93 57	gravida@protonmail.couk	New Zealand	https://reddit.com/user/110
b-2290	Quisque Libero LLC	01 45 48 71 11	sapien.molestie.orci@hotmail.couk	China	https://baidu.com/group/9
b-2294	Auctor Mauris Vel LLP	08 09 28 74 14	nec.tempus@icloud.couk	United States	https://instagram.com/fr
b-2298	Elit Etiam Laoreet Associ	07 69 74 17 45	ultrices@google.couk	Canada	https://yahoo.com/fr

companies 4 ×

Output

Action Output ▾

#	Time	Action	Message
✓ 9	10:26:06	SELECT * FROM nueva_db.transactions LIMIT 0, 1000	588 row(s) returned
⚠ 10	10:26:37	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/companies.csv' INTO T...	100 row(s) affected, 21 warning(s): 1265 Data truncated for column 'company_name'
✓ 11	10:26:43	SELECT * FROM nueva_db.companies LIMIT 0, 1000	100 row(s) returned

Creo la tabla credit_cards (Dimension table)

```sql
41      -- Tabla credit_card
42 •  CREATE TABLE IF NOT EXISTS credit_cards (
43      id VARCHAR(20) PRIMARY KEY,
44      user_id INT,
45      Iban VARCHAR(50),
46      pan VARCHAR(50),
47      pin VARCHAR(4),
48      cvv VARCHAR(3),
49      Track1 VARCHAR(100),
50      Track2 VARCHAR(100),
51      expiring_date date
52      );
53
```

Output

Action Output ▾

#	Time	Action	Message
✓ 1	10:30:37	CREATE TABLE IF NOT EXISTS credit_cards (id VARCHAR(20) PRIMARY KEY, user_id INT, Iban VARCHA...	0 row(s) affected

```sql
54 •  LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/credit_cards.csv'
55      INTO TABLE credit_cards
56      FIELDS TERMINATED BY ','
57      LINES TERMINATED BY '\n'
58      IGNORE 1 ROWS;
59
```

Output

Action Output ▾

#	Time	Action	Message
⚠ 1	10:31:36	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/credit_cards.csv' INTO TA...	275 row(s) affected, 275 warning(s): 1265 Data truncated for column 'expiring_date' at ro...

```sql
1 •  SELECT * FROM nueva_db.credit_cards;
```

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

id	user_id	Iban	pan	pin	cvv	Track1	Track2	expiring_date
CcU-2938	275	TR30195031221357681 7638661	5424465566813633	3257	984	%B8383712448554646^WovsxejDpwiev^8604...	%B7653863056044187=8007163336?3	0000-00-00
CcU-2945	274	DO26854763748537475216568689	5142423821948828	9080	887	%B4621311609958661^UftuyfsSeimxn^06106...	%B4149568437843501=5107140330?1	0000-00-00
CcU-2952	273	BG45IVQL52710525608255	4556 453 55 5287	4598	438	%B2183285104307501^CddyytcUxwfdq^5907...	%B6778580257827162=6906859740 0?7	0000-00-00
CcU-2959	272	CR7242477244335841535	372461377349375	3583	667	%B7281111956795320^XocddijBckecd^09016...	%B4246154489281853=280522391 6?8	0000-00-00
CcU-2966	271	BG72LKTQ156276283 77363	448566 886747 7265	4900	130	%B4728932322756223^JhlgvsuFbmwgj^7202...	%B2318571115599881=890821578 4?5	0000-00-00
CcU-2973	270	PT87806228135092429456346	544 58654 54343 384	8760	887	%B4761405253275637^HjnnipoBlejrl^7108515...	%B7816169831446746=1310277 2?9	0000-00-00
CcU-2980	269	DE39241881883086277136	402400 7145845969	5075	596	%B7320483593870549^OokzqxrHpased^4901...	%B2474313962214151=041221913 1?5	0000-00-00
CcU-2987	268	GE8968143483774878 1813	3763 747687 76666	2298	797	%B4750646345146674^PjmlyrfGwwtrf^83051...	%B5441935173418615=410370453 6?7	0000-00-00
CcU-2994	267	BH62714428368066765294	344283273252593	7545	595	%B1583759784015674^GmqoyhtUtoqrn^2507...	%B4141467473024349=650680095 50?4	0000-00-00
CcU-3001	266	CY49087426654774581266832110	511722 924833 2244	9562	867	%B6227288756728648^AwxilfcFmgvdy^2808...	%B3429355750963453=530526830 5?3	0000-00-00
CcU-3008	265	LU5072166936 16119230	4485744464433884	1856	740	%B7182449430529226^MkoutyhTfdvpo^1708...	%B6235123731781366=940563816 6?8	2004-05-25
CcU-3015	264	PS1193982162957159683 42456821	3784 662233 17389	3246	822	%B5776250106724742^QvvzkrcCwrovm^530...	%B3561372148267521=190547316 6?7	0000-00-00
CcU-3022	263	GT91695162850556977423121857	5164 1379 4842 3951	5610	342	%B8456622214332875^XmwxhenXwoxbt^050...	%B7761154174374063=230423342 9?4	0000-00-00

credit_cards 1 ×

Output

Action Output ▾

#	Time	Action	Message
⚠ 1	10:31:36	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/credit_cards.csv' INTO T...	275 row(s) affected, 275 warning(s): 1265 Data truncated for column 'expiring_date' at r...
✓ 2	10:32:23	SELECT * FROM nueva_db.credit_cards LIMIT 0, 1000	275 row(s) returned

Creo la tabla products (Dimension table)

```sql
60      -- Tabla product
61 • ⊖  CREATE TABLE IF NOT EXISTS products (
62          id VARCHAR(100) PRIMARY KEY,
63          product_name VARCHAR(50),
64          price DECIMAL(10,2),
65          colour VARCHAR(20),
66          weight DECIMAL(10,2),
67          warehouse_id VARCHAR(20)
68      );
69
```

Output

Action Output ▾

#	Time	Action	Message
✓ 1	10:34:36	CREATE TABLE IF NOT EXISTS products (id VARCHAR(100) PRIMARY KEY, product_name VARCHAR(50)...	0 row(s) affected

```sql
70 •  LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/products.csv'
71      INTO TABLE products
72      FIELDS TERMINATED BY ','
73      LINES TERMINATED BY '\n'
74      IGNORE 1 ROWS;
75
```

Output

Action Output ▾

#	Time	Action	Message
⚠ 1	10:35:43	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/products.csv' INTO TABL...	100 row(s) affected, 100 warning(s): 1366 Incorrect decimal value: '$161.11' for column '...

```
1 •  SELECT * FROM nueva_db.products;
```

id	product_name	price	colour	weight	warehouse_id
1	Direwolf Stannis	0.00	#7c7c7c	1.00	WH-4
10	Karstark Dorne	0.00	#f4f4f4	2.40	WH--5
100	south duel	0.00	#6d6d6d	3.00	WH--95
11	Karstark Dorne	0.00	#141414	2.70	WH--6
12	duel Direwolf	0.00	#a8a8a8	2.10	WH--7
13	palpatine chewbacca	0.00	#2b2b2b	1.00	WH--8
14	Direwolf	0.00	#c4c4c4	2.00	WH--9
15	Stannis warden	0.00	#dbdbdb	1.50	WH--10
16	the duel warden	0.00	#666666	3.00	WH--11
17	skywalker ewok sith	0.00	#7c7c7c	3.20	WH--12
18	Karstark warden	0.00	#c4c4c4	0.80	WH--13
19	dooku solo	0.00	#3f3f3f	0.60	WH--14
2	Tarly Stark	0.00	#919191	2.00	WH-3

products 1 ×

Output

Action Output

#	Time	Action	Message
⚠ 1	10:35:43	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/products.csv' INTO TABL...	100 row(s) affected, 100 warning(s): 1366 Incorrect decimal value: '$161.11' for column ...
✓ 2	10:36:20	SELECT * FROM nueva_db.products LIMIT 0, 1000	100 row(s) returned

Creo la tabla users (Dimension table)

```
3       -- Tabla users
4 • ⊖  CREATE TABLE IF NOT EXISTS users (
5       id INT PRIMARY KEY,
6       name VARCHAR(50),
7       surname VARCHAR(50),
8       phone VARCHAR(30),
9       email VARCHAR(50),
10      birth_date VARCHAR(50),
11      birth_date_year VARCHAR(50),
12      country VARCHAR(50),
13      city VARCHAR(50),
14      post_code VARCHAR(50),
15      address VARCHAR(50),
16      address2 VARCHAR(50),
17      address3 VARCHAR(50)
18      );
```

Output

Action Output

#	Time	Action	Message
✓ 1	11:18:21	CREATE TABLE IF NOT EXISTS users (id INT PRIMARY KEY, name VARCHAR(50), surname VA...	0 row(s) affected

```
20      -- Importo datos de usuarios
21 •    LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_ca.csv'
22      INTO TABLE users
23      FIELDS TERMINATED BY ','
24      LINES TERMINATED BY '\n'
25      IGNORE 1 ROWS
26      (@id, @name, @surname, @phone, @email, @birth_date, @birth_date_year,@country, @city, @post_code, @address, @address2, @address3)
27      SET id = @id,
28          name = @name,
29          surname = @surname,
30          phone = @phone,
31          email = @email,
32          birth_date = REPLACE(TRIM(@birth_date), '"', ''),
33          birth_date_year = REPLACE(TRIM(@birth_date_year), '"', ''),
34          country = @country,
35          city = @city,
36          post_code = @post_code,
37          address = REPLACE(REPLACE(TRIM(@address), '"', ''), '-', ' '),
38          address2 = REPLACE(REPLACE(TRIM(@address2), '"', ''), '-', ' '),
39          address3 = REPLACE(REPLACE(TRIM(@address3), '"', ''), '-', ' ');
40
```

Output

Action Output

#	Time	Action	Message
✓ 1	11:19:44	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_ca.csv' I...	75 row(s) affected Records: 75 Deleted: 0 Skipped: 0 Warnings: 0

```
41 ●        LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_usa.csv'
42    INTO TABLE users
43    FIELDS TERMINATED BY ','
44    LINES TERMINATED BY '\n'
45    IGNORE 1 ROWS
46    (@id, @name, @surname, @phone, @email, @birth_date, @birth_date_year,@country, @city, @post_code, @address, @address2, @address3)
47    SET id = @id,
48        name = @name,
49        surname = @surname,
50        phone = @phone,
51        email = @email,
52        birth_date = REPLACE(TRIM(@birth_date), '"', ''),
53        birth_date_year = REPLACE(TRIM(@birth_date_year), '"', ''),
54        country = @country,
55        city = @city,
56        post_code = @post_code,
57        address = REPLACE(REPLACE(TRIM(@address), '"', ''), '-', ' '),
58        address2 = REPLACE(REPLACE(TRIM(@address2), '"', ''), '-', ' '),
59        address3 = REPLACE(REPLACE(TRIM(@address3), '"', ''), '-', ' ');
60
61 ●        LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_uk.csv'
```

Output

#	Time	Action	Message
✓ 1	11:19:44	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_ca.csv' I...	75 row(s) affected Records: 75 Deleted: 0 Skipped: 0 Warnings: 0
✓ 2	11:22:26	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_usa.csv' ...	150 row(s) affected Records: 150 Deleted: 0 Skipped: 0 Warnings: 0

```
61 ●        LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_uk.csv'
62    INTO TABLE users
63    FIELDS TERMINATED BY ','
64    LINES TERMINATED BY '\n'
65    IGNORE 1 ROWS
66    (@id, @name, @surname, @phone, @email, @birth_date, @birth_date_year,@country, @city, @post_code, @address, @address2, @address3)
67    SET id = @id,
68        name = @name,
69        surname = @surname,
70        phone = @phone,
71        email = @email,
72        birth_date = REPLACE(TRIM(@birth_date), '"', ''),
73        birth_date_year = REPLACE(TRIM(@birth_date_year), '"', ''),
74        country = @country,
75        city = @city,
76        post_code = @post_code,
77        address = REPLACE(REPLACE(TRIM(@address), '"', ''), '-', ' '),
78        address2 = REPLACE(REPLACE(TRIM(@address2), '"', ''), '-', ' '),
79        address3 = REPLACE(REPLACE(TRIM(@address3), '"', ''), '-', ' ');
80
```

Output

#	Time	Action	Message
✓ 1	11:19:44	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_ca.csv' I...	75 row(s) affected Records: 75 Deleted: 0 Skipped: 0 Warnings: 0
✓ 2	11:22:26	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_usa.csv' ...	150 row(s) affected Records: 150 Deleted: 0 Skipped: 0 Warnings: 0
✓ 3	11:23:27	LOAD DATA LOCAL INFILE 'C:/ProgramData/MySQL/MySQL Server 8.0/Uploads/users_uk.csv' I...	50 row(s) affected Records: 50 Deleted: 0 Skipped: 0 Warnings: 0

Debido a que los campos address y birth_date contenian "," y "-" generaban un error al importarlos, entonces los separe y procedi a a realizar los siguientes comandos para dejarlos como estaban en excel

```
81    -- desactivar cofiguracion de seguridad
82 ●  SET SQL_SAFE_UPDATES = 0;
83
84    -- Modificaciones para corregir los datos (address)
85 ●  ALTER TABLE users
86    ADD COLUMN new_address VARCHAR(100);
87
88 ●  UPDATE users
89    SET new_address = CONCAT_WS(', ', address, address2, address3);
90
91 ●  ALTER TABLE users
92    DROP COLUMN address,
93    DROP COLUMN address2,
94    DROP COLUMN address3;
95
96 ●  ALTER TABLE users
97    CHANGE COLUMN new_address address VARCHAR(100);
98
```

Output

#	Time	Action	Message
✓ 1	11:28:10	SET SQL_SAFE_UPDATES = 0	0 row(s) affected
✓ 2	11:28:15	ALTER TABLE users ADD COLUMN new_address VARCHAR(100)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
✓ 3	11:28:21	UPDATE users SET new_address = CONCAT_WS(', ', address, address2, address3)	275 row(s) affected Rows matched: 275 Changed: 275 Warnings: 0
✓ 4	11:28:27	ALTER TABLE users DROP COLUMN address, DROP COLUMN address2, DROP COLUMN addre...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
✓ 5	11:28:36	ALTER TABLE users CHANGE COLUMN new_address address VARCHAR(100)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0

```sql
99     -- Modificaciones para corregir los datos (birth_date)
100 •  ALTER TABLE users
101    ADD COLUMN new_birth_date VARCHAR(100);
102
103 •  UPDATE users
104    SET new_birth_date = CONCAT_WS(', ', birth_date, birth_date_year);
105
106 •  ALTER TABLE users
107    ADD COLUMN temp_birth_date DATE;
108
109 •  UPDATE users
110    SET temp_birth_date = STR_TO_DATE(new_birth_date, '%b %d, %Y');
111
112 •  ALTER TABLE users
113    DROP COLUMN new_birth_date,
114    DROP COLUMN birth_date,
115    DROP COLUMN birth_date_year;
116
117 •  ALTER TABLE users
118    CHANGE COLUMN temp_birth_date Birth_date DATE;
```

Output — Action Output

#	Time	Action	Message
✓ 1	11:33:20	SELECT * FROM nueva_db.users LIMIT 0, 1000	275 row(s) returned
✓ 2	11:33:30	ALTER TABLE users ADD COLUMN new_birth_date VARCHAR(100)	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
✓ 3	11:33:44	UPDATE users SET new_birth_date = CONCAT_WS(', ', birth_date, birth_date_year)	275 row(s) affected Rows matched: 275 Changed: 275 Warnings: 0
✓ 4	11:33:47	ALTER TABLE users ADD COLUMN temp_birth_date DATE	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
✓ 5	11:33:49	UPDATE users SET temp_birth_date = STR_TO_DATE(new_birth_date, '%b %d, %Y')	275 row(s) affected Rows matched: 275 Changed: 275 Warnings: 0
✓ 6	11:33:52	ALTER TABLE users DROP COLUMN new_birth_date, DROP COLUMN birth_date, DROP COLU...	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0
✓ 7	11:33:58	ALTER TABLE users CHANGE COLUMN temp_birth_date Birth_date DATE	0 row(s) affected Records: 0 Duplicates: 0 Warnings: 0

Tabla users con las modificaciones realizadas:

```sql
1 •  SELECT * FROM nueva_db.users;
```

id	name	surname	phone	email	country	city	post_code	address	Birth_date
1	Zeus	Gamble	1-282-581-0551	interdum.enim@protonmail.edu	United States	Lowell	73544	348 7818 Sagittis St.	1985-11-17
2	Garrett	Mcconnell	(718) 257-2412	integer.vitae.nibh@protonmail.org	United States	Des Moines	59464	903 Sit Ave	1992-08-23
3	Ciaran	Harrison	(522) 598-1365	interdum.feugiat@aol.org	United States	Columbus	56518	736 2063 Tellus St.	1998-04-29
4	Howard	Stafford	1-411-740-3269	ornare.egestas@icloud.edu	United States	Kailua	77417	Ap #545 2244 Erat. Rd.	1989-02-18
5	Hayfa	Pierce	1-554-541-2077	et.malesuada.fames@hotmail.org	United States	Sandy	31564	341 2821 Ultrices Av.	1998-09-26
6	Joel	Tyson	(718) 288-8020	gravida.nunc.sed@yahoo.ca	United States	Nashville	96838	888 2799 Amet Street	1989-10-15
7	Rafael	Jimenez	(817) 689-0478	eget@outlook.ca	United States	Hillsboro	29874	8627 Malesuada Rd.	1981-12-04
8	Nissim	Franks	(692) 157-3469	egestas.aliquam.fringilla@google.ca	United States	Jackson	61750	Ap #251 7144 Integer St.	1993-08-01
9	Mannix	Mcclain	(590) 883-2184	aliquam.nisl@outlook.com	United States	Richmond	35987	647 3080 Lacus. St.	1987-01-24
10	Robert	Mccarthy	(324) 746-6771	fermentum@protonmail.com	United States	Eugene	85526	P.O. Box 773, 3594 Ornare St.	1984-04-30
11	Joan	Baird	(981) 429-8106	et@outlook.net	United States	Lincoln	35211	P.O. Box 687, 8917 Ligula St.	1990-02-25
12	Benedict	Wheeler	1-515-824-2855	tincidunt.donec.vitae@hotmail.couk	United States	Lewiston	92393	748 8694 Porttitor Avenue	1999-08-06
13	Allegra	Stanton	1-927-753-6488	proin.eget@protonmail.ca	United States	Kearney	14947	4457 Ante. Av.	1990-05-19
14	Sara	Flynn	1-311-646-9333	integer@outlook.net	United States	Warren	20288	P.O. Box 865, 4397 Ante St.	1988-12-27
15	Noelani	Patrick	1-723-488-5894	sem.magna@google.com	United States	Orlando	47987	596 5044 Sapien, Street	1993-09-17

users 2 ✕

Output — Action Output

#	Time	Action	Message
✓ 1	11:36:32	SELECT * FROM nueva_db.users LIMIT 0, 1000	275 row(s) returned

Creo las Foreign Key para relacionar las tablas

Diagrama luego de las conexiones realizadas (1:N) con la tabla transactions.
La tabla products por ahora no se realiza conexion ya que se hará más adelante.
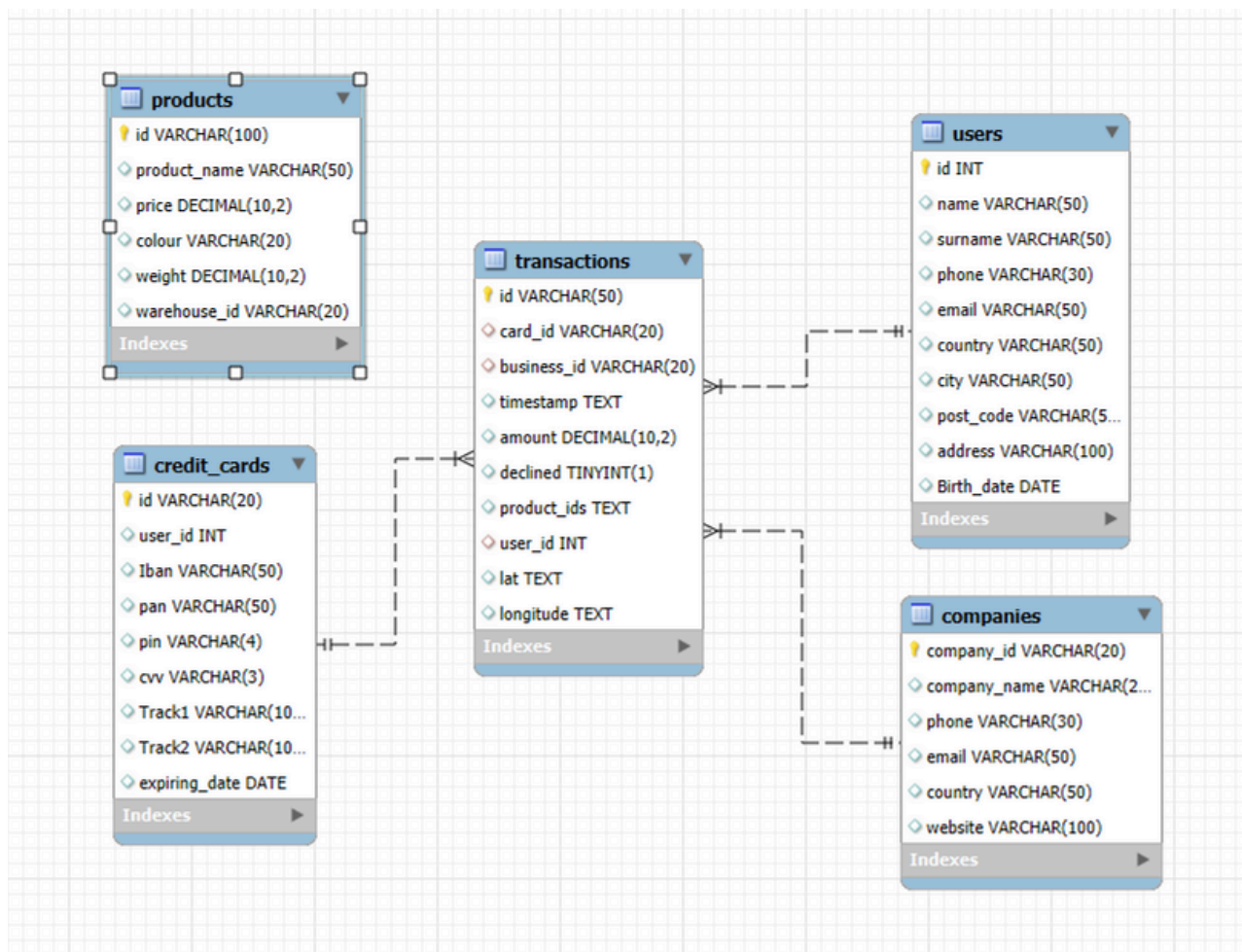
Ejercicio 1

Realiza una subconsulta que muestre a todos los usuarios con más de 30 transacciones utilizando al menos 2 tablas.

```sql
 3      -- Usuarios con mas de 30 transacciones
 4 •    SELECT id, name, surname
 5      FROM users
 6    ⊖ WHERE id IN (
 7          SELECT transactions.user_id
 8          FROM transactions
 9          WHERE declined = 0
10          GROUP BY transactions.user_id
11          HAVING COUNT(transactions.id) > 30
12      );
13
```

id	name	surname
92	Lynn	Riddle
267	Ocean	Nelson
272	Hedwig	Gilbert
NULL	NULL	NULL

users 6 ×

Output

#	Time	Action	Message
✓ 1	11:49:43	SELECT id, name, surname FROM users WHERE id IN (SELECT transactions.user_id FROM...	3 row(s) returned

Ejercicio 2

Muestra la media de amount por IBAN de las tarjetas de crédito en la compañía Donec Ltd., utiliza por lo menos 2 tablas.

```sql
14      -- Compania Donec LTD
15 •    SELECT cc.Iban, ROUND(AVG(t.amount),2) as Media_amount
16      FROM credit_cards cc
17      JOIN transactions t ON cc.id = t.card_id
18      JOIN companies c ON t.business_id = c.company_id
19      WHERE c.company_name = 'Donec Ltd'
20      GROUP BY cc.Iban;
21
```

Iban	Media_amount
PT87806228135092429456346	203.72

Result 8 ×

Output

#	Time	Action	Message
✓ 1	11:50:44	SELECT cc.Iban, ROUND(AVG(t.amount),2) as Media_amount FROM credit_cards cc JOIN transa...	1 row(s) returned

Crea una nueva tabla que refleje el estado de las tarjetas de crédito basado en si las últimas tres transacciones fueron declinadas y genera la siguiente consulta:

1 - ¿Cuántas tarjetas están activas?

```sql
5  ●  ⊖  CREATE TABLE credit_card_status (
6            card_id VARCHAR(20) PRIMARY KEY,
7            active tinyint,
8            FOREIGN KEY (card_id) REFERENCES credit_cards(id)
9         );
```

Output

Action Output

#	Time	Action	Message
✓	1 22:06:03	CREATE TABLE credit_card_status (card_id VARCHAR(20) PRIMARY KEY, active tinyint, FOREIGN KEY (card_id) REFERENCES credit_car...	0 row(s) affected

```sql
57  ●  SELECT
58         cc.id,
59     ⊖  CASE
60     ⊖      WHEN (SELECT COUNT(*)
61                 FROM transactions t
62                 WHERE t.card_id = cc.id
63                 ORDER BY t.timestamp DESC
64                 LIMIT 3
65              ) = 3 AND
66     ⊖        (SELECT COUNT(*)
67                 FROM transactions t
68                 WHERE t.card_id = cc.id
69                 AND t.declined = 1
70                 ORDER BY t.timestamp DESC
71                  LIMIT 3) = 3
72              THEN 0
73              ELSE 1
74         END AS active
75     FROM credit_cards cc;
```

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

id	active
► CcU-2938	1
CcU-2945	1
CcU-2952	1
CcU-2959	1
CcU-2966	1
CcU-2973	1
CcU-2980	1

Result 14 ✕

Output

Action Output

#	Time	Action	Message
✓	1 21:58:37	SELECT cc.id, CASE WHEN (SELECT COUNT(*) FROM transactions t WHERE t.card_id = cc.id ORDER BY t.ti...	275 row(s) returned

```
55  ●   INSERT INTO credit_card_status (card_id, active)
56      SELECT
57          cc.id,
58          CASE
59              WHEN (SELECT COUNT(*)
60                      FROM transactions t
61                      WHERE t.card_id = cc.id
62                      ORDER BY t.timestamp DESC
63                      LIMIT 3
64                   ) = 3 AND
65                  (SELECT COUNT(*)
66                      FROM transactions t
67                      WHERE t.card_id = cc.id
68                      AND t.declined = 1
69                      ORDER BY t.timestamp DESC
70                      LIMIT 3) = 3
71              THEN 0
72              ELSE 1
73          END AS active
74      FROM credit_cards cc;
```

Output

Action Output

#	Time	Action	Message
●	1 22:07:48	INSERT INTO credit_card_status (card_id, active) SELECT cc.id, CASE WHEN (SELECT COUNT(*) FROM transactions t ...	275 row(s) affected Records: 275 Duplicates: 0 Warnings: 0

```
75  ●   SELECT COUNT(*) as Número_de_Tarjetas_Activas
76      FROM credit_card_status
77      WHERE active = 1;
```

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

Número_de_Tarjetas_Activas
▶ 275

Result 18 ×

Output

Action Output

#	Time	Action	Message
●	1 22:11:36	SELECT COUNT(*) as Número_de_Tarjetas_Activas FROM credit_card_status WHERE active = 1 LIMIT 0, 1000	1 row(s) returned

⭐⭐ Sprint 4 - Nivel 3

Crea una tabla con la que podamos unir los datos del nuevo archivo products.csv con la base de datos creada, teniendo en cuenta que desde transaction tienes product_ids. Genera la siguiente consulta:

Ejercicio 1
Necesitamos conocer el número de veces que se ha vendido cada producto.

Para esto necesitamos crear una tabla intermedia con relacion de muchos a muchos

```
3  ●  ⊖  CREATE TABLE transaction_products (
4            transaction_id VARCHAR(50),
5            product_id VARCHAR(100),
6            PRIMARY KEY (transaction_id, product_id),
7            FOREIGN KEY (transaction_id) REFERENCES transactions(id),
8            FOREIGN KEY (product_id) REFERENCES products(id)
9        );
```

Output

Action Output

#	Time	Action	Message
●	1 13:35:48	CREATE TABLE transaction_products (transaction_id VARCHAR(50), product_id VARCHAR(...	0 row(s) affected
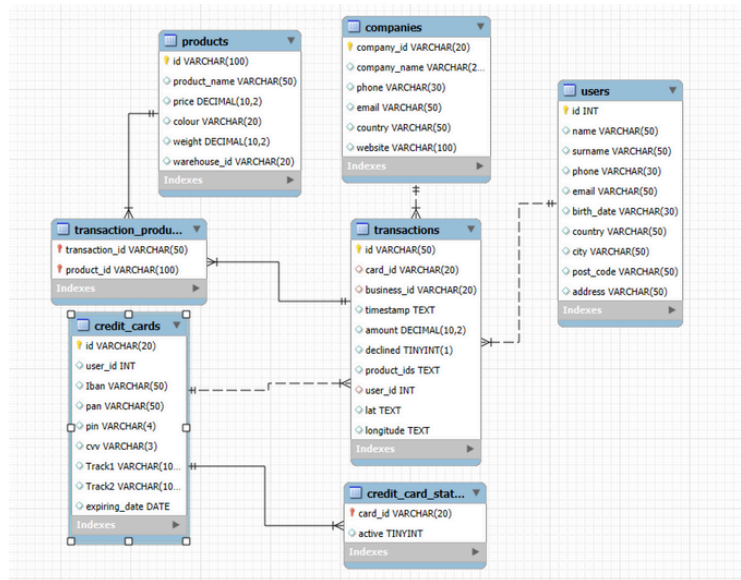
Insertamos los datos en la tabla 'transaction_products' separando los product_id que estaban en una misma celda con ','

```
10
11 •  INSERT INTO transaction_products (transaction_id, product_id)
12    SELECT t.id as transaction_id, p.id as product_id
13    FROM transactions t
14    JOIN products p  ON FIND_IN_SET(CAST(p.id AS CHAR), REPLACE(t.product_ids,' ', '')) > 0;
```

Output

#	Time	Action	Message
1	12:15:42	INSERT INTO transaction_products (transaction_id, product_id) SELECT t.id as transaction_id, p.id...	1452 row(s) affected Records: 1452 Duplicates: 0 Warnings: 0

```
16 •  SELECT * FROM transaction_products;
17
```

Result Grid

transaction_id	product_id
02C6201E-D90A-1859-B4EE-88D2986D3B02	1
122DC333-E19F-D629-DCD8-9C54CF1EBB9A	1
1753A288-9FC1-52E6-5C39-A1FFB97B0D3A	1
1A6CECFB-2E3A-65A3-72D9-2FDB58A1E4BA	1
1EA2B262-D507-AD14-4374-4D532967113F	1

transaction products2 ×

Output

#	Time	Action	Message
1	12:15:42	INSERT INTO transaction_products (transaction_id, product_id) SELECT t.id as transaction_id, p.i...	1452 row(s) affected Records: 1452 Duplicates: 0 Warnings: 0
2	12:17:07	SELECT * FROM transaction_products LIMIT 0, 1000	1000 row(s) returned

Numero de veces que se ha vendido cada producto

```
19     -- Numero de veces que se ha vendido cada producto
20 •  SELECT tp.product_id, p.product_name, COUNT(*) as Ventas_totales
21    FROM transaction_products tp
22    JOIN products p ON tp.product_id = p.id
23    GROUP BY tp.product_id, p.product_name
24    ORDER BY Ventas_totales DESC;
25
```

Result Grid

product_id	product_name	Ventas_totales
23	riverlands north	68
67	Winterfell	68
79	Direwolf riverlands the	66
43	duel	65
2	Tarly Stark	63
47	Tully	62
17	skywalker ewok sith	61
07	finn Winterfell	61

Result 4 ×

Output

#	Time	Action	Message
1	12:28:27	SELECT tp.product_id, p.product_name, COUNT(*) as Ventas_totales FROM transaction_products...	26 row(s) returned