

Alumna: Milene Quiles Gonçalves

Sprint 4

Nivell 1

- Ex 1. Realitza una subconsulta que mostri tots els usuaris amb més de 30 transaccions utilitzant almenys 2 taules.

```
3      -- EX 1.
4
5  •   SELECT id, name, surname, totaltransactions
6      FROM users_all
7  JOIN (
8      SELECT user_id, COUNT(transactions.id) AS totaltransactions
9      FROM transactions
10     GROUP BY user_id
11 ) AS transactions_count
12 ON transactions_count.user_id = users_all.id
13 WHERE totaltransactions > 30;
14
15
16      -- EX 2.
17
```

Result Grid					Filter Rows:	Export:	Wrap Cell Content:
	id	name	surname	totaltransactions			
▶	92	Lynn	Riddle	39			
	267	Ocean	Nelson	52			
	272	Hedwig	Gilbert	76			
	275	Kenyon	Hartman	48			

- Ex 2. Mostra la mitjana de la suma de transaccions per IBAN de les targetes de crèdit en la companyia Donec Ltd. utilitzant almenys 2 taules.

```
16      -- EX 2.
17 •    SELECT iban, AVG(total_transactions) as avg_transactions
18      FROM (
19          SELECT COUNT(transactions.ID) AS total_transactions, iban
20          FROM transactions
21          JOIN company ON company.company_id = transactions.business_id
22          JOIN credit_cards ON transactions.user_id = credit_cards.user_id
23          WHERE company_name = "Donec Ltd"
24          GROUP BY iban
25      ) AS counting_transactions
26      GROUP BY iban;
27      -- la media de transacciones por iban és 2 --
```

Result Grid			Filter Rows:	Export:	Wrap Cell Content:
	iban	avg_transactions			
▶	TR301950312213576817638661	2.0000			

Nivell 2

Crea una nova taula que reflecteixi l'estat de les targetes de crèdit basat en si les últimes tres transaccions van ser declinades i genera la següent consulta:

Ex 1. Quantes targetes estan actives?

```
35  SELECT card_id,
36  CASE
37      WHEN SUM(declined) >= 3 THEN 'Inativo'
38      ELSE 'Ativo'
39  END AS status
40  FROM (
41      SELECT card_id, declined,
42          ROW_NUMBER() OVER (PARTITION BY card_id ORDER BY timestamp DESC) AS rn
43      FROM transactions
44  ) AS last_transactions
45  WHERE rn <= 3
46  GROUP BY card_id;
47
48  • SELECT COUNT(Card_id) as active_cards
49  FROM credit_card_status
50  WHERE status = "Ativo"
51  HAVING active_cards;
52  -- 275 tarjetas están activas --
```

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

active_cards
275

Nivell 3

Crea una taula amb la qual puguem unir les dades del nou arxiu products.csv amb la base de dades creada, tenint en compte que des de transaction tens product_ids. Genera la següent consulta:

Ex 1. Necessitem conèixer el nombre de vegades que s'ha venut cada producte.

Creo una tabla intermedia llamada transaction_products y inserto los registros de transaction_id y product_id (separando cada producto en una línea con su correspondiente transaction_id)

Luego, creo las relaciones entre esta tabla y las tablas transaction y product.

```
54 -- Nivell 3 --
55 -- EX 1.
56
57 • CREATE TABLE transaction_products (
58     transaction_id VARCHAR(100),
59     product_id VARCHAR(100),
60     PRIMARY KEY (transaction_id, product_id)
61 );
62
63 • INSERT INTO transaction_products
64 SELECT transactions.id, SUBSTRING_INDEX(SUBSTRING_INDEX(product_ids, ',', n.digit+1), ',', -1) AS product_id
65 FROM transactions
66 JOIN
67 (SELECT 0 as digit UNION ALL SELECT 1 UNION ALL SELECT 2 UNION ALL SELECT 3 UNION ALL SELECT 4) n
68 ON LENGTH(REPLACE(product_ids, ',', '')) <= LENGTH(product_ids)-n.digit;
69
70 • SELECT COUNT(transaction_id) as total_selling, product_name
71 FROM transaction_products
72 INNER JOIN products ON transaction_products.product_id = products.id
73 GROUP BY product_id, product_name
74 ORDER BY total_selling DESC;
```

A continuación, hice una query para calcular o numero de ventas de cara producto

	total_selling	product_name
▶	32	riverlands north
	31	Direwolf riverlands the
	30	north of Casterly
	29	duel
	28	Winterfell Lannister
	26	skywalker ewok sith
	26	Tully
	26	kingsblood Littlefinger the
	26	skywalker ewok
	24	Winterfell
	23	Direwolf Littlefinger
	22	Direwolf Stannis
	22	palpatine chewbacca
	22	Lannister Barratheon Direwolf
	22	duel tourney
	21	Tarly Stark
	21	jinn Winterfell
	20	dooku solo
	20	skywalker ewok
	20	Direwolf Stannis
	18	Karstark Dorne
	18	Tully Dorne
	17	duel tourney Lannister
	16	Dorne bastard