

Nivel 1:

Ejercicio 2:

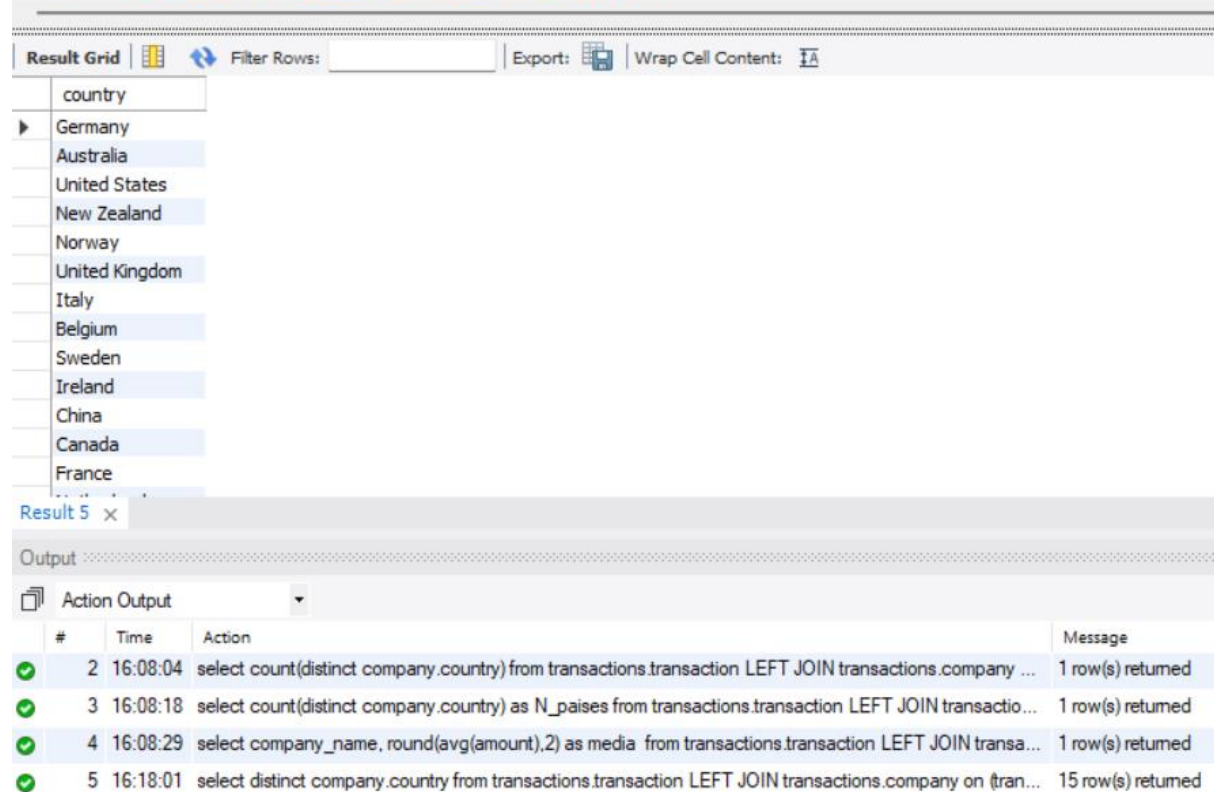
2.1 Llistat dels països que estan fent compres.

```
select distinct company.country
```

```
from transactions.transaction
```

```
LEFT JOIN transactions.company on (transaction.company_id = company.id);
```

```
1  # Ejercicio 2:
2  #2.1 Llistat dels països que estan fent compres.
3
4  • select distinct company.country
5    from transactions.transaction
6      LEFT JOIN transactions.company on (transaction.company_id = company.id);
7
8  -- Listado de paises que realizan las compras.
```



Result Grid

country
Germany
Australia
United States
New Zealand
Norway
United Kingdom
Italy
Belgium
Sweden
Ireland
China
Canada
France

Result 5 x

Output

Action Output

#	Time	Action	Message
✓ 2	16:08:04	select count(distinct company.country) from transactions.transaction LEFT JOIN transactions.company ...	1 row(s) returned
✓ 3	16:08:18	select count(distinct company.country) as N_paises from transactions.transaction LEFT JOIN transactio...	1 row(s) returned
✓ 4	16:08:29	select company_name, round(avg(amount),2) as media from transactions.transaction LEFT JOIN transa...	1 row(s) returned
✓ 5	16:18:01	select distinct company.country from transactions.transaction LEFT JOIN transactions.company on (tran...	15 row(s) returned

2.2 Des de quants països es realitzen les compres.

```
select count(distinct company.country) as N_paises
```

```
from transactions.transaction
```

```
LEFT JOIN transactions.company on (transaction.company_id = company.id);
```

```

10 # 2.2 Des de quants països es realitzen les compres.
11
12 • select count(distinct company.country) as N_paises
13 from transactions.transaction
14     LEFT JOIN transactions.company on (transaction.company_id = company.id);
15
16 -- 15 països son los que hacen las compras

```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	N_paises			
	15			

2.3 Identifica la companyia amb la mitjana més gran de vendes.

```
select company_name, round(avg(amount),2) as media
```

```
from transactions.transaction
```

```
    LEFT JOIN transactions.company on (transaction.company_id = company.id)
```

```
where declined = 0
```

```
group by company_name
```

```
order by media desc
```

```
limit 1;
```

```

18 #2.3 Identifica la companyia amb la mitjana més gran de vendes.
19
20 • select company_name, round(avg(amount),2) as media
21 from transactions.transaction
22     LEFT JOIN transactions.company on (transaction.company_id = company.id)
23 where declined = 0
24 group by company_name
25 order by media desc
26 limit 1;
27
28 -- La compañía con mayor media de compras es Eget Ipsum Ltd con 481.86 he usado el filtro declined = 0 para escoger transacciones efectuadas

```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
	company_name	media		
	Eget Ipsum Ltd	481.86		

Ejercicio 3:

3.1 3.1 Mostra totes les transaccions realitzades per empreses d'Alemanya.

```
select *
```

```
from transactions.transaction
```

```
where company_id IN (select id
```

```
from transactions.company
```

```
where country= 'Germany');
```

```
# Ejercicio 3
#3.1 Mostra totes les transaccions realitzades per empreses d'Alemanya.
select *
from transactions.transaction
where company_id IN (
    select id
    from transactions.company
    where country= 'Germany');
```

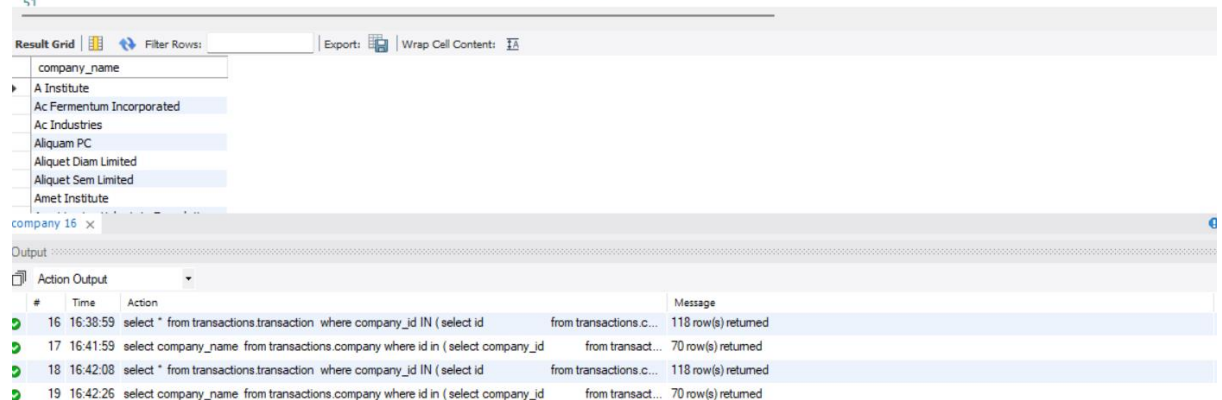
	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
8B1D1D-5B23-A76C-55EF-C568E49A05DD	CdU-2938	b-2222	275	83.7839	-178.86	2021-07-07 17:43:16	293.57	0
2C3281-C9C1-A387-44F8-729FB4B51C76	CdU-2938	b-2222	275	20.2004	-116.84	2021-05-09 10:25:08	119.36	1
D2E608-5C9E-D1B3-4999-B99F43AD735A	CdU-2959	b-2234	275	9.68811	130.282	2021-04-17 05:30:17	252.47	1
069F53-965E-A2A8-CE06-CA8C4FD92501	CdU-2959	b-2234	275	1.64819	-158.007	2021-04-15 13:37:18	60.99	0
56A42E-47CF-8D24-FD01-C0B689713128	CdU-4219	b-2302	170	-43.9695	-117.525	2021-07-26 07:29:18	49.53	0
476ED9-0C13-1962-F87B-D3563924B539	CdU-4359	b-2302	221	-56.4901	114.801	2022-02-26 20:33:54	430.49	0
2DC333-E19F-D629-DCD8-9C54CF1EBB9A	CdU-4366	b-2302	221	29.6372	-166.173	2021-06-09 06:04:14	172.01	0
5267BA-2E7D-957C-C42C-6450A2B3ED54	CdU-4520	b-2302	210	20.6724	14.9732	2021-12-29 20:38:23	17.97	0
CAE5B5-8FB1-3E4A-4C85-0EA4167534F4	CdU-4849	b-2302	189	-53.6202	93.0533	2021-12-31 00:29:42	388.04	0
...

Time	Action	Message
13 16:34:13	select count(distinct company.country) from transactions.transaction LEFT JOIN transactions.company ...	1 row(s) returned
14 16:34:25	select count(distinct company.country) as N_paises from transactions.transaction LEFT JOIN transaccio...	1 row(s) returned
15 16:34:42	select company_name, round(avg(amount),2) as media from transactions.transaction LEFT JOIN transa...	1 row(s) returned
16 16:38:59	select * from transactions.transaction where company_id IN (select id from transactions.c...	118 row(s) returned

Ejercicio 3.2 Llista les empreses que han realitzat transaccions per un amount superior a la mitjana de totes les transaccions.

```
select company_name
from transactions.company
where id in ( select company_id
              from transactions.transaction
              where amount > ( select avg(amount)
                              from transactions.transaction))
order by company_name;
```

```
39  #3.2 Llista les empreses que han realitzat transaccions per un amount superior a la mitjana de totes les transaccions.
40
41  • select company_name
42    from transactions.company
43  where id in (
44      select company_id
45      from transactions.transaction
46      where amount > (
47          select avg(amount)
48          from transactions.transaction))
49  order by company_name;
50  # para este ejercicio no he usado el filtro where declined=0 ya que piden todas las transacciones más allá de que haya cobrado o no cobrado la empresa
51
```



#	Time	Action	Message
16	16:38:59	select * from transactions.transaction where company_id IN (select id from transactions.c...	118 row(s) returned
17	16:41:59	select company_name from transactions.company where id in (select company_id from transact...	70 row(s) returned
18	16:42:08	select * from transactions.transaction where company_id IN (select id from transactions.c...	118 row(s) returned
19	16:42:26	select company_name from transactions.company where id in (select company_id from transact...	70 row(s) returned

3.3 Eliminaran del sistema les empreses que no tenen transaccions registrades, entrega el llistat d'aquestes empreses.

```
select id, company_id
from transactions.transaction
where company_id not in ( select id
                          from transactions.company);
```

```

52  #3.3 Eliminaran del sistema les empreses que no tenen transaccions registrades, entrega el llistat d'aquestes empreses.
53
54  • select id, company_id
55    from transactions.transaction
56   where company_id not in (
57         select id
58         from transactions.company);
59
60

```

Result Grid		Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
id	company_id				
HULL	HULL				

Nivel 2

/*Exercici 1

Identifica els cinc dies que es va generar la quantitat més gran d'ingressos a l'empresa per vendes.

Mostra la data de cada transacció juntament amb el total de les vendes. */

```
select date(timestamp) as fecha, sum(amount) as ventas
```

```
from transactions.transaction
```

```
where declined = 0
```

```
group by date(timestamp)
```

```
order by 2 desc
```

```
limit 5;
```

-- he utilizado el filtro declined=0 para quitar las transacciones que no se han efectuado

```

1  /*Exercici 1
2  Identifica els cinc dies que es va generar la quantitat més gran d'ingressos a l'empresa per vendes.
3  Mostra la data de cada transacció juntament amb el total de les vendes. */
4
5  • select date(timestamp) as fecha, sum(amount) as ventas
6  from transactions.transaction
7  where declined = 0
8  group by date(timestamp)
9  order by 2 desc
10 limit 5;
11
12 -- he utilizado el filtro declined=0 para quitar las transacciones que no se han efectuado
13

```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
fecha	ventas			
2021-12-20	1532.36			
2021-04-22	1397.96			
2021-05-09	1344.37			
2022-02-26	1337.62			
2021-03-29	1325.12			

/*Exercici 2

Quina és la mitjana de vendes per país? Presenta els resultats ordenats de major a menor mitjà.*/

```
select country, round(avg(amount),2) as media_compra
```

```
from transactions.company
```

```
left join transactions.transaction on (company.id=transaction.company_id)
```

```
where declined= 0
```

```
group by country
```

```
order by media_compra desc;
```

-- he utilizado el filtro declined=0 para quitar las transacciones que no se han efectuado, pongo round 2 para que solo aparezcan 2 decimales

```

14  /*Exercici 2
15  Quina és la mitjana de vendes per país? Presenta els resultats ordenats de major a menor mitjà.*/
16
17  • select country, round(avg(amount),2) as media_compra
18  from transactions.company
19  left join transactions.transaction on (company.id=transaction.company_id)
20  where declined= 0
21  group by country
22  order by media_compra desc;
23
24  -- he utilizado el filtro declined=0 para quitar las transacciones que no se han efectuado, pongo round 2 para que solo aparezcan 2 decimales
25

```

country	media_compra
United States	287.53
Ireland	285.83
Sweden	276.67
United Kingdom	271.77
Canada	261.94
Belgium	255.22
Norway	251.11

#	Time	Action	Message
19	16:42:26	select company_name from transactions.company where id in (select company_id from transact...	70 row(s) returned
20	16:45:06	select id, company_id from transactions.transaction where company_id not in (select id f...	0 row(s) returned
21	16:48:05	select date(timestamp) as fecha, sum(amount) as ventas from transactions.transaction where declined = ...	5 row(s) returned
22	16:55:42	select country, round(avg(amount),2) as media_compra from transactions.company left join transactions....	15 row(s) returned

/*Exercici 3

En la teva empresa, es planteja un nou projecte per a llançar algunes campanyes publicitàries per a fer competència a la companyia "Non Institute".

Per a això, et demanen la llista de totes les transaccions realitzades per empreses que estan situades en el mateix país que aquesta companyia.

Mostra el llistat aplicant JOIN i subconsultes.

Mostra el llistat aplicant solament subconsultes.*/

-- Mostra el llistat aplicant JOIN i subconsultes.

select t.*

from transactions.transaction as t

left join transactions.company on (t.company_id=company.id)

where company_name != 'Non Institute'and country in (select country

from transactions.company

where company_name='Non Institute');


```
-- Mostra el llistat aplicant JOIN i subconsultes.
• select t.*
  from transactions.transaction as t
    left join transactions.company on (t.company_id=company.id)
  where company_name != 'Non Institute' and country in (
    select country
    from transactions.company
    where company_name='Non Institute');
```

It Grid								
Filter Rows:		Export:		Wrap Cell Content:				
d	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
B928E1C-EC14-A760-0A75-871477649D6A	CcU-2980	b-2246	275	-41.0496	161.685	2021-08-10 08:14:49	383.73	0
CD2011A-A2B1-C365-41E1-2AB00C65147A	CcU-2980	b-2246	275	-54.4792	-82.7974	2022-03-05 20:41:20	60.07	1
334349E-CEB0-3D68-A4D4-FEB7718A1ACE	CcU-3092	b-2310	275	-20.4859	150.87	2021-05-03 22:37:23	458.74	0
C2B9A38-77B4-28CD-1FE8-14DED863E773	CcU-3092	b-2310	275	-78.0295	18.5295	2021-10-18 07:27:35	477.95	1
479B3D2-B7BA-C7BB-4CE3-8D7C2DE85ABB	CcU-2994	b-2326	133	66.2672	172.399	2021-08-09 00:58:07	309.45	0
52598C2-029D-D684-4B66-91EDF393EBFF	CcU-2994	b-2326	126	-67.0189	-141.672	2021-07-05 03:10:00	395.43	0
B636B58-A2E8-7C69-D9C9-C54535DAFD3B	CcU-2994	b-2326	131	70.2543	-13.1336	2021-07-06 08:48:46	195.06	0

Time	Action	Message
20 16:45:06	select id, company_id from transactions.transaction where company_id not in (select id	f... 0 row(s) returned
21 16:48:05	select date(timestamp) as fecha, sum(amount) as ventas from transactions.transaction where declined = ...	5 row(s) returned
22 16:55:42	select country, round(avg(amount),2) as media_compra from transactions.company left join transactions....	15 row(s) returned
23 16:58:25	select t.* from transactions.transaction as t left join transactions.company on (t.company_id=company id)...	70 row(s) returned

-- Mostra el llistat aplicant solament subconsultes.

```
select *
```

```
from transactions.transaction
```

```
where company_id in ( select id
```

```
  from transactions.company
```

```
  where company_name!= 'Non Institute' and country =(select country
```

```
    from transactions.company
```

```
    where company_name='Non Institute'));
```



```

42  -- Mostra el llistat aplicant solament subconsultes.
43  • select *
44    from transactions.transaction
45   where company_id in (
46       select id
47       from transactions.company
48      where company_name!= 'Non Institute' and country =(
49          select country
50          from transactions.company
51         where company_name='Non Institute'));
52

```

Result Grid									
Filter Rows:									
Edit:									
Export/Import:									
Wrap Cell Content:									
id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined	
2B928E1C-EC14-A760-0A75-871477649D6A	CcU-2980	b-2246	275	-41.0496	161.685	2021-08-10 08:14:49	383.73	0	
ACD2011A-A2B1-C365-41E1-2AB00C65147A	CcU-2980	b-2246	275	-54.4792	-82.7974	2022-03-05 20:41:20	60.07	1	
4334349E-CEB0-3D68-A4D4-FEB7718A1ACE	CcU-3092	b-2310	275	-20.4859	150.87	2021-05-03 22:37:23	458.74	0	
BC2B9A38-77B4-28CD-1FE8-14DED863E773	CcU-3092	b-2310	275	-78.0295	18.5295	2021-10-18 07:27:35	477.95	1	
1479B3D2-B7BA-C7BB-4CE3-8D7C2DE85ABB	CcU-2994	b-2326	133	66.2672	172.399	2021-08-09 00:58:07	309.45	0	
152598C2-029D-D684-4B66-91EDF393EBFF	CcU-2994	b-2326	126	-67.0189	-141.672	2021-07-05 03:10:00	395.43	0	
1B636B58-A2E8-7C69-D9C9-C54535DAFD3B	CcU-2994	b-2326	131	70.2543	-13.1336	2021-07-06 08:48:46	195.06	0	

ransaction 4 x

Output

Action Output

#	Time	Action	Message
21	16:48:05	select date(timestamp) as fecha, sum(amount) as ventas from transactions.transaction where declined = ...	5 row(s) returned
22	16:55:42	select country, round(avg(amount),2) as media_compra from transactions.company left join transactions....	15 row(s) returned
23	16:58:25	select t.* from transactions.transaction as t left join transactions.company on (t.company_id=company.id)...	70 row(s) returned
24	17:00:11	select * from transactions.transaction where company_id in (select id from transactions.co...	70 row(s) returned

Nivel 3

/*Ejercicio 1 Presenta el nom, telèfon, país, data i amount, d'aquelles empreses que van realitzar transaccions amb un valor comprès entre 100 i 200 euros i en alguna d'aquestes dates: 29 d'abril del 2021, 20 de juliol del 2021 i 13 de març del 2022. Ordena els resultats de major a menor quantitat.*/

```
select company_name, phone, country, timestamp, amount
```

```
from transactions.company
```

```
left join transactions.transaction on company.id=transaction.company_id
```

```
where amount between 100 and 200 and date(timestamp) in ('2021-04-29','2021-07-20','2022-03-13')
```

```
order by amount desc;
```

```

6 • select company_name, phone, country, timestamp, amount
7 from transactions.company
8     left join transactions.transaction on company.id=transaction.company_id
9     where amount between 100 and 200 and date(timestamp) in ('2021-04-29', '2021-07-20', '2022-03-13')
10    order by amount desc;
11 -- en este caso no he usado el filtro declined = 0 para que salgan todas las transacciones
12 */

```

company_name	phone	country	timestamp	amount
Interdum Feugiat Sed Associates	04 88 40 32 52	United Kingdom	2021-07-20 10:12:15	164.86
Nunc Interdum Incorporated	05 18 15 48 13	Germany	2022-03-13 13:37:34	164.32
Enim Condimentum Ltd	09 55 51 66 25	United Kingdom	2021-04-29 06:17:02	149.89
Lorem Eu Incorporated	01 83 66 62 07	Canada	2021-07-20 08:47:44	133.39
Nunc Interdum Incorporated	05 18 15 48 13	Germany	2021-04-29 02:25:49	111.51

/* Exercici 2 Necessitem optimitzar l'assignació dels recursos i dependrà de la capacitat operativa que es requereixi, per la qual cosa et demanen la informació sobre la quantitat de transaccions que realitzen les empreses, però el departament de recursos humans és exigent i vol un llistat de les empreses on especifiquis si tenen més de 4 transaccions o menys. */

```
select company_id, count(transaction.id) as n_compras,
```

```
case
```

```
    when count(transaction.id) > 4 THEN 'Más de 4'
```

```
    when count(transaction.id) < 4 THEN 'Menos de 4'
```

```
end as Cantidad
```

```
from transactions.transaction
```

```
group by company_id
```

```
order by n_compras desc;
```

```
-- hacer join para poner nombre de empresa
```

```
--
17 • select company_id, count(transaction.id) as n_compras,
18 case
19     when count(transaction.id) > 4 THEN 'Más de 4'
20     when count(transaction.id) < 4 THEN 'Menos de 4'
21 end as Cantidad
22 from transactions.transaction
23 group by company_id
24 order by n_compras desc;
25
26 -- hacer join para poner nombre de empresa
```

Result Grid   Filter Rows: Export:  Wrap Cell Content: 

	company_id	n_compras	Cantidad
▶	b-2302	105	Más de 4
	b-2346	59	Más de 4
	b-2326	57	Más de 4
	b-2278	56	Más de 4
	b-2362	54	Más de 4
	b-2494	52	Más de 4
	b-2618	30	Más de 4
	b-2230	2	Menos de 4
	b-2234	2	Menos de 4
	b-2238	2	Menos de 4

Result 3 x

Output

 Action Output

	#	Time	Action	Message
✓	24	17:00:11	select * from transactions.transaction where company_id in (select id from transactions.co...	70 row(s) returned
✓	25	17:04:59	select company_name, phone, country, timestamp, amount from transactions.company left join transactio...	5 row(s) returned
✓	26	17:05:51	select company_name, phone, country, timestamp, amount from transactions.company left join transactio...	5 row(s) returned
✓	27	17:07:46	select company_id, count(transaction.id) as n_compras, case when count(transaction.id) > 4 THEN 'M...	100 row(s) returned