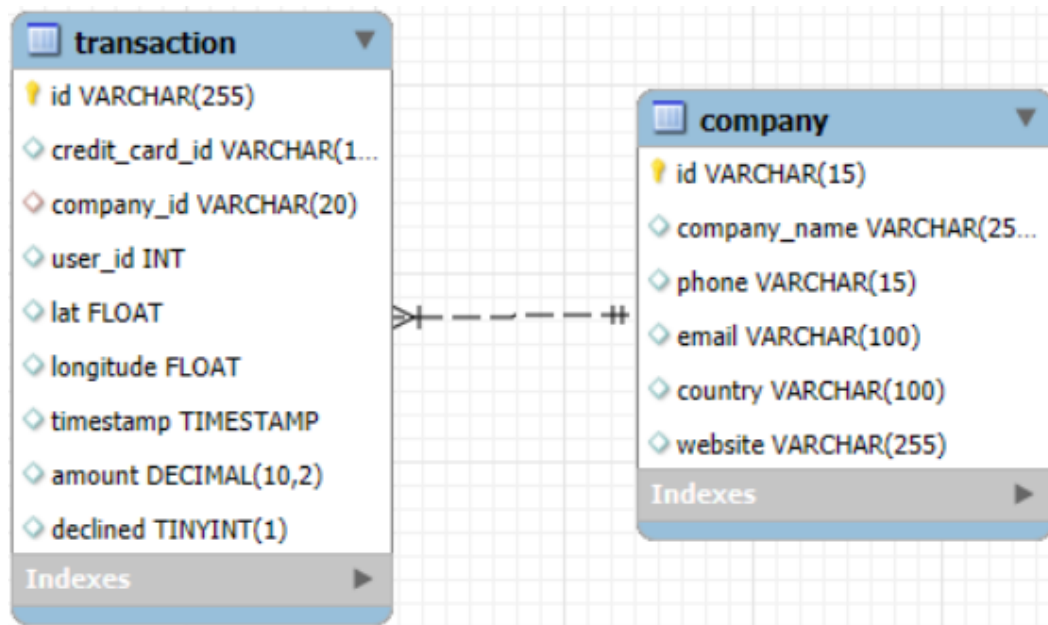


N1E1



Tenemos dos tablas, relacionadas en N:1 con transaction siendo N y company siendo 1.

Se relacionan entre ellas mediante **company_id** (que es la clave foránea en transaction) y **id** (que es la primaria de company).

La relación tiene sentido, ya que una compañía puede tener varias transacciones, pero una misma transacción no la pueden hacer varias compañías a la vez.

N1E2

```
6 -- llistat dels països que estan fent compres.
7 • SELECT DISTINCT country
8 FROM company
9 JOIN transaction
10 ON (company.id = company_id)
11 -- WHERE company_id IN (company.id) No es necesario teniendo el ON que iguala lo mismo
12 ORDER BY country;
13
14 -- Des de quants països es realitzen les compres.
15 • SELECT count(DISTINCT country) as NumPaïsos
16 -----
```

Result Grid

country
Australia
Belgium
Canada
China
France
Germany
Ireland

Result 3

Output

Action Output

#	Time	Action	Message
1	13:32:23	SELECT DISTINCT country FROM company JOIN transaction ON (company.id = company_id) -- WHERE comp...	15 row(s) returned

```

14 -- Des de quants països es realitzen les compres.
15 • SELECT count(DISTINCT country) as NumPaís
16 FROM company
17 JOIN transaction
18 ON (company.id = company_id);

```

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

Result 4 x

Output

Action Output

#	Time	Action	Message
1	13:32:59	SELECT count(DISTINCT country) as NumPaís FROM company JOIN transaction ON (company.id = company_id);	1 row(s) returned

```

19 -- Identifica la companyia amb la mitjana més gran de vendes. (Es refereix al valor de les vendes, no el nº)
20 • SELECT company_name as Nombre, round(AVG(amount), 2) as MediaVentas
21 FROM transaction
22 JOIN company
23 ON (company_id = company.id)
24 GROUP BY company_id
25 ORDER BY MediaVentas DESC
26 LIMIT 1;
27
28 -- Exercici 3

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:	Fetch rows:
Nombre	MediaVentas			
Eget Ipsum Ltd	473.08			

Result 7 x

Output

Action Output

#	Time	Action	Message
1	12:17:21	SELECT company_name as Nombre, round(AVG(amount), 2) as MediaVentas FROM transaction JOIN company ...	1 row(s) returned

N1E3

```

31 -- Mostra totes les transaccions realitzades per empreses d'Alemanya.
32 • SELECT *
33 FROM transaction
34 WHERE company_id IN (SELECT id FROM company WHERE country = "Germany");
35
36 -- Llista les empreses que han realitzat transaccions per un amount superior a la mitjana de totes .

```

Result Grid		Filter Rows:		Edit:		Export/Imports:		Wrap Cell Content:	
id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount		
108B1D1D-5B23-A76C-55EF-C568E49A05DD	CcU-2938	b-2222	275	83.7839	-178.86	2021-07-07 17:43:16	293.57		
EA2C3281-C9C1-A387-44F8-729FB4B51C76	CcU-2938	b-2222	275	20.2004	-116.84	2021-05-09 10:25:08	119.36		
0DD2E608-5C9E-D1B3-4999-B99F43AD735A	CcU-2959	b-2234	275	9.68811	130.282	2021-04-17 05:30:17	252.47		
AB069F53-965E-A2A8-CE06-CA8C4FD92501	CcU-2959	b-2234	275	1.64819	-158.007	2021-04-15 13:37:18	60.99		
0466A42E-47CF-8D24-FD01-C0B689713128	CcU-4219	b-2302	170	-43.9695	-117.525	2021-07-26 07:29:18	49.53		

Transaction 14 x

Output

Action Output

#	Time	Action	Message
1	12:29:31	SELECT * FROM transaction WHERE company_id IN (SELECT id FROM company WHERE country = "German...	118 row(s) returned

```

36 -- Llista les empreses que han realitzat transaccions per un amount superior a la mitjana de totes les transaccions.
37 • SELECT company_name
38 FROM company
39 WHERE id IN (SELECT company_id
40 FROM transaction
41 WHERE amount > (SELECT AVG(amount)
42 FROM transaction));

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

company_name
Ac Fermentum Incorporated
Magna A Neque Industries
Fusce Corp.
Ante Taculis Nec Foundation
Donec Ltd

Output:
 Action Output

#	Time	Action	Message
1	12:30:11	SELECT company_name FROM company WHERE id IN (SELECT company_id FROM transaction WHERE ...	70 row(s) returned

```

45 -- Eliminarian del sistema les empreses que no tenen transaccions registrades, entrega el llistat d'aquestes empreses.
46 • SELECT company_name
47 FROM company
48 WHERE id NOT IN (SELECT DISTINCT company_id FROM transaction);
49 -- Se podría usar también (sería más óptimo) un EXISTS ()
50
51

```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: [IA](#)

company_name

Output:
 Action Output

#	Time	Action	Message
1	13:34:14	SELECT company_name FROM company WHERE id NOT IN (SELECT DISTINCT company_id FROM transacti...	0 row(s) returned

N2E1

```
2 -- 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.
3 • SELECT substring(timestamp, 1, 10) as Date, sum(amount) as Total
4 FROM transaction
5 GROUP BY Date
6 order by Total desc
7 LIMIT 5;
8
9
10 -- Exercici 2
11 -- Quina és la mitjana de vendes per país? Presenta els resultats ordenats de major a menor mitjà.
12 • SELECT country, round(AVG(amount), 2) as MediaVentas
13 FROM company
14 JOIN transaction
15 ON (company.id = company_id)
```

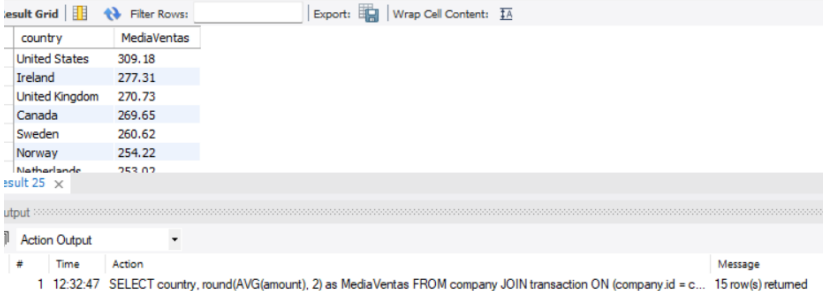


The screenshot shows a SQL query execution interface. The top part displays the SQL code for Exercise 1, which selects the top 5 dates by total sales. The bottom part shows the results in a table with two columns: 'Date' and 'Total'. The results are as follows:

Date	Total
2021-03-29	1564.87
2021-12-20	1532.36
2021-06-15	1409.90
2021-05-09	1403.73
2021-06-21	1403.11

N2E2

```
10 -- Exercici 2
11 -- Quina és la mitjana de vendes per país? Presenta els resultats ordenats de major a menor mitjà.
12 • SELECT country, round(AVG(amount), 2) as MediaVentas
13 FROM company
14 JOIN transaction
15 ON (company.id = company_id)
16 GROUP BY country
17 ORDER BY MediaVentas desc;
18
```




The screenshot shows a SQL query execution interface. The top part displays the SQL code for Exercise 2, which selects the average sales by country. The bottom part shows the results in a table with two columns: 'country' and 'MediaVentas'. The results are as follows:

country	MediaVentas
United States	309.18
Ireland	277.31
United Kingdom	270.73
Canada	269.65
Sweden	260.62
Norway	254.22
Netherlands	253.07

N2E3

```
21 -- Mostra el llistat aplicant JOIN i subconsultes.
22 • SELECT company_name, amount
23 FROM company
24 JOIN transaction
25 ON (company.id = company_id)
26 WHERE country = (SELECT country FROM company WHERE company_name = "Non Institute");
27
28 -- Mostra el llistat aplicant solament subconsultes.
```



The screenshot shows a SQL query execution interface. The top part displays the SQL code for Exercise 3, which selects company names and amounts. The bottom part shows the results in a table with two columns: 'company_name' and 'amount'. The results are as follows:

company_name	amount
Sed Nunc Ltd	383.73
Sed Nunc Ltd	60.07
Non Magna LLC	458.74
Non Magna LLC	477.95
Enim Conditementum Ltd	309.45
Enim Conditementum Ltd	395.43
Enim Conditementum Ltd	105.06

```

28      -- Mostra el llistat aplicant solament subconsultes.
29      SELECT company_name, amount
30      FROM company, transaction
31      WHERE company.id = company_id
32      AND country = (SELECT country FROM company WHERE company_name = "Non Institute");
33
34

```

Result Grid	Filter Rows:	Export:	Wrap Cell Contents:
company_name	amount		
Sed Nunc Ltd	383.73		
Sed Nunc Ltd	60.07		
Non Magna LLC	458.74		
Non Magna LLC	477.95		
Enim Condimentum Ltd	309.45		
Enim Condimentum Ltd	395.43		
Enim Condimentum Ltd	105.06		

result 28 x

Output

Action Output

#	Time	Action	Message
1	12:35:09	SELECT company_name, amount FROM company, transaction WHERE company.id = company_id AND countr...	100 row(s) returned

N3E1

```
2 -- Presenta el nom, telèfon, país, data i amount, d'aquelles empreses que van realitzar transaccions:
3 • SELECT company_name, phone, country, substring(timestamp, 1, 10) as Date, amount
4 FROM company
5 JOIN transaction
6 ON (company.id = company_id)
7 WHERE substring(timestamp, 1, 10) IN ("2021-04-29", "2021-07-20", "2022-03-13")
8 AND amount BETWEEN 100 AND 200
9 ORDER BY amount desc;
10
11
12 -- Exercici 2
13 -- Necessitem optimitzar l'assignació dels recursos i dependrà de la capacitat operativa que es requereixi
14 • SELECT company_name, IF(count(amount)>4, "Més de 4 transaccions", "4 o menys transaccions") as NumTrans
15 FROM company
```

Result Grid

Filter Rows: Export: Wrap Cell Content: ☐

company_name	phone	country	Date	amount
Interdum Feugiat Sed Associates	04 88 40 32 52	United Kingdom	2021-07-20	164.86
Nunc Interdum Incorporated	05 18 15 48 13	Germany	2022-03-13	164.32
Enim Condimentum Ltd	09 55 51 66 25	United Kingdom	2021-04-29	149.89
Lorem Eu Incorporated	01 83 66 62 07	Canada	2021-07-20	133.39
Nunc Interdum Incorporated	05 18 15 48 13	Germany	2021-04-29	111.51

Result 6 x

Output

Action Output

#	Time	Action	Message
1	12:37:41	SELECT company_name, phone, country, substring(timestamp, 1, 10) as Date, amount FROM company JOIN tra...	5 row(s) returned

N3E2

```
13 -- Necessitem optimitzar l'assignació dels recursos i dependrà de la capacitat operativa que es requereixi
14 • SELECT company_name, IF(count(amount)>4, "Més de 4 transaccions", "4 o menys transaccions") as NumTrans
15 FROM company
16 JOIN transaction
17 ON (company.id = company_id)
18 GROUP BY company_name
19 ORDER BY NumTrans;
20
```

Result Grid

Filter Rows: Export: Wrap Cell Content: ☐

company_name	NumTrans
Ac Fermentum Incorporated	4 o menys transaccions
Magna A Neque Industries	4 o menys transaccions
Fusce Corp.	4 o menys transaccions
Convallis In Incorporated	4 o menys transaccions
Ante Iaculis Nec Foundation	4 o menys transaccions
Donec Ltd	4 o menys transaccions
Sed Minc Ltd	4 o menys transaccions

Result 7 x

Output

Action Output

#	Time	Action	Message
1	12:38:35	SELECT company_name, IF(count(amount)>4, "Més de 4 transaccions", "4 o menys transaccions") as NumTran...	100 row(s) returned