

S2.01

Nivell 1

- Exercici 1

A partir dels documents adjunts (*estructura_dades* i *dades_introduir*), importa les dues taules. Mostra les característiques principals de l'esquema creat i explica les diferents taules i variables que existeixen. Assegura't d'incloure un diagrama que il·lustri la relació entre les diferents taules i variables.

A partir de los documentos **estructura_dades** y **dades_introduir**, se han importado dos tablas en la base de datos. Estas tablas contienen información relevante sobre empresas y sus transacciones comerciales.

El esquema creado sigue un modelo relacional con dos tablas principales:

- **Company (Empresas)**
- **Transaction (Transacciones)**

Estas tablas están relacionadas mediante el atributo **company_id**, que actúa como clave primaria en la tabla **Company** y como clave foránea en la tabla **Transaction**.

Este modelo relacional esta compuesto por la tabla de hechos que seria Transaction mientras que company es la tabla de dimensiones, en este caso la relación es uno a muchos (una compañía puede realizar muchas transacciones)

Tabla: Company

Esta tabla almacena información sobre las empresas que realizan transacciones.

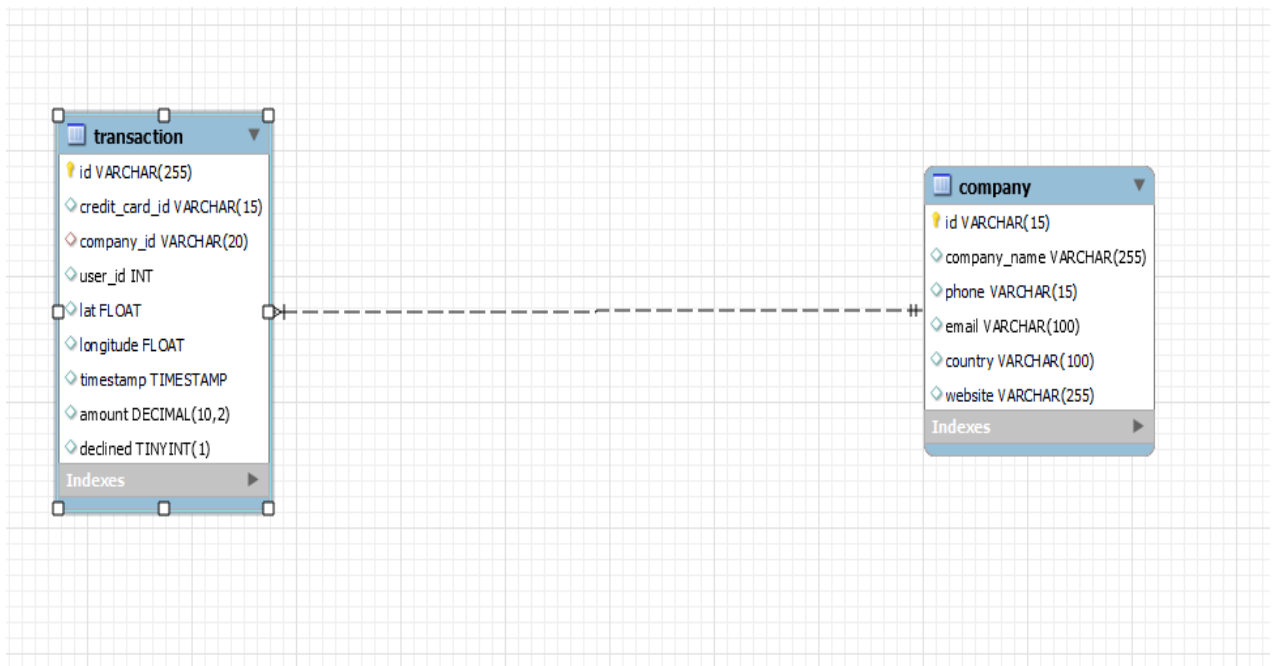
Nombre del Campo	Tipo de Dato	Descripción
id	INT (PK)	Identificador único de la empresa
company_name	VARCHAR	Nombre de la empresa
country	VARCHAR	País donde se encuentra la empresa
phone	VARCHAR	Número de teléfono de la empresa

Tabla: Transaction

Esta tabla contiene las transacciones realizadas por las empresas.

Nombre del Campo	Tipo de Dato	Descripción
------------------	--------------	-------------

id	INT (PK)	Identificador único de la transacción
company_id	INT (FK)	Identificador de la empresa que realiza la transacción
date	DATE	Fecha de la transacción
amount	DECIMAL	Importe de la transacción en euros



- Exercici 2

Utilitzant JOIN realitzaràs les següents consultes:

- Llistat dels països que estan fent compres.

```

SELECT distinct country
FROM company
JOIN transaction ON company.id=transaction.company_id;
  
```

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

○

Output				
#	Time	Action	Message	Duration / Fetch
591	10:54:03	SELECT company.company_name, AVG (transaction.amount) AS company_sales FROM company JOIN transaction...	1 row(s) returned	0.000 sec / 0.000 sec
592	10:56:03	SELECT count(DISTINCT company.country) AS PaisesQueCompran FROM company JOIN transaction ON compa...	1 row(s) returned	0.015 sec / 0.000 sec
593	10:58:08	SELECT distinct country FROM company JOIN transaction ON company.id=transaction.company_id LIMIT 0, 1000	16 row(s) returned	0.000 sec / 0.000 sec

Des de quants països es realitzen les compres.

```
SELECT count(DISTINCT company.country)
FROM company
JOIN transaction ON company.id=transaction.company_id;
```

count(DISTINCT company.country)
15

Output				
#	Time	Action	Message	Duration / Fetch
592	10:56:03	SELECT count(DISTINCT company.country) AS PaisesQueCompran FROM company JOIN transaction ON compa...	1 row(s) returned	0.015 sec / 0.000 sec
593	10:58:08	SELECT distinct country FROM company JOIN transaction ON company.id=transaction.company_id LIMIT 0, 1000	16 row(s) returned	0.000 sec / 0.000 sec
594	10:58:33	SELECT count(DISTINCT company.country) AS PaisesQueCompran FROM company JOIN transaction ON compa...	1 row(s) returned	0.016 sec / 0.000 sec

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

```

10 • SELECT company.company_name, AVG (transaction.amount) AS company_sales
11 FROM company
12 JOIN transaction on company_id=company.id
13 GROUP BY company_name
14 ORDER BY company_sales DESC
15 LIMIT 1;
16

```

Result Grid

company_name	company_sales
Eget Ipsum Ltd	473.075000

595 | 10:59:11 | SELECT company.company_name, AVG (transaction.amount) AS company_sales FROM company JOIN transaction... | 1 row(s) returned | 0.000 sec / 0.000 sec

- Exercici 3

Utilitzant només subconsultes (sense utilitzar JOIN):

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

```

17 SELECT *
18 FROM transaction
19 WHERE company_id IN (
20     select id from company where country = "Germany"
21 );
22
23
24

```

Result Grid

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
1088 ID ID-5823-A76C-55EF-C568E49A050D	CdJ-2938	b-2222	275	83.7839	-178.86	2021-07-07 17:43:16	293.57	0
EA2C3281-C9C1-A387-44F8-729FB4B51C76	CdJ-2938	b-2222	275	20.2004	-116.84	2021-05-09 10:25:08	119.36	1
00D2E608-5C9E-D1B3-4999-899F43AD735A	CdJ-2959	b-2234	275	9.68811	130.282	2021-04-17 05:30:17	252.47	1
AB069F53-965E-A2A8-CE06-CABC4FD92501	CdJ-2959	b-2234	275	1.64819	-158.007	2021-04-15 13:37:18	60.99	0
0466A42E-47CF-8D24-FD01-C0B689713128	CdJ-4219	b-2302	170	-43.9695	-117.525	2021-07-26 07:29:18	49.53	0
0A476ED9-0C13-1962-F87B-D13563924B539	CdJ-4359	b-2302	221	-56.4901	114.801	2022-02-26 20:33:54	430.49	0
122DC333-E19F-D629-DCD8-9C54CF1EBB9A	CdJ-4366	b-2302	221	29.6372	-166.173	2021-06-09 06:04:14	172.01	0
135267BA-2E7D-957C-C42C-6450A2B3ED54	CdJ-4520	b-2302	210	20.6724	14.9732	2021-12-29 20:38:23	17.97	0
14CAE5B5-8FB1-3E4A-4C85-0EA4167534F4	CdJ-4849	b-2302	189	-53.6202	93.0533	2021-12-31 00:29:42	388.04	0
158A3ACB-541C-0BCC-65BD-6373CC67BF1C	CdJ-4849	b-2302	183	42.5424	-170.347	2022-03-08 05:02:19	240.29	0
162C7E78-2668-7971-A1E4-D2124E732451	CdJ-4527	b-2302	210	-69.1381	58.0017	2021-04-11 05:59:18	231.26	0
1717FD68-ADAD-7082-A748-9112BE892CCC	CdJ-4219	b-2302	172	69.4892	-138.411	2021-12-29 16:18:54	249.91	0
1753A288-9FC1-52E6-5C39-A1FFB97B0D3A	CdJ-4345	b-2302	222	57.9422	-114.729	2021-08-17 05:32:08	497.84	0
186F530E-0E27-B1FE-80F7-15861CEB7726	CdJ-4310	b-2302	225	-72.7448	36.6211	2021-12-20 13:13:45	238.16	0
18C4E20D-1E4C-F39E-2198-C668D81DC235	CdJ-4849	b-2302	177	68.0133	91.4839	2021-09-24 18:55:25	237.04	0
18CBA7C-ABC1-813D-FAF3-4B4B97428368	CdJ-4219	b-2302	173	51.3881	-156.371	2021-06-21 03:21:34	58.16	0
19E1EC3E-2119-1EFD-8AAE-5930D4A4E63F	CdJ-4219	b-2302	154	-56.0839	116.987	2021-07-06 21:40:15	29.63	0
1B117D49-936C-8A6C-E94B-303293AA239	CdJ-4219	b-2302	163	-75.099	109.034	2021-05-09 23:56:04	371.35	0
1B521826-5860-5A86-5364-4EB6A5CC21B7	CdJ-4226	b-2302	231	-53.4613	49.1484	2021-08-14 02:39:50	476.33	0
1C383CC4-8919-7616-6A57-EEB00787B688	CdJ-4415	b-2302	217	81.1737	62.8835	2021-09-27 16:07:34	462.35	0
2075812D-69A8-7022-57B8-33ED49872766	CdJ-4247	b-2302	229	-9.03682	88.9005	2022-02-13 04:07:29	87.44	0
241827A6-E87C-60A3-5AC9-8BCFD42B7D2A	CdJ-4849	b-2302	190	-12.1172	-175.322	2021-08-04 04:44:35	487.64	0
2585891B-C4C7-075E-358B-8575339E5177	CdJ-4450	b-2302	215	32.9171	-40.6059	2021-08-24 05:32:36	253.49	0
263035AA-8758-E413-8CC4-6D8F81B8F899	CdJ-4338	b-2302	223	36.61	83.1953	2021-06-21 11:23:01	499.23	0
2C9A4725-B19-621C-4EE4-AE9E31CFE980	CdJ-4219	b-2302	149	-46.7357	162.102	2021-08-14 09:23:34	28.95	0
33525F74-4864-C19F-7D23-ABD78668B7C4	CdJ-4492	b-2302	212	10.3105	13.9999	2021-12-15 12:22:03	423.71	0

transaction 8 x

Output

#	Time	Action	Message	Duration / Fetch
594	10:58:33	SELECT count(DISTINCT company.country) AS PaisosQueCompan FROM company JOIN transaction ON compa...	1 row(s) returned	0.016 sec / 0.000 sec
595	10:59:11	SELECT company.company_name, AVG (transaction.amount) AS company_sales FROM company JOIN transaction...	1 row(s) returned	0.000 sec / 0.000 sec
596	11:00:04	SELECT * FROM transaction WHERE company_id IN (select id from company where country = "Germany") LI...	118 row(s) returned	0.000 sec / 0.000 sec

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

```

25 • SELECT company_name
26 FROM company
27 WHERE id IN (
28     SELECT DISTINCT company_id FROM transaction
29     WHERE amount > (SELECT AVG(amount) FROM transaction)
30 );
31
32 • SELECT company_name

```

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

company_name
Fusce Corp.
Anite Iaculis Nec Foundation
Donec Ltd
Sed Nunc Ltd
Nascetur Ridiculus Mus Inc.
Vestibulum Lorem PC
Gravida Sagittis LLP
Mus Aenean Eget Foundation
Dis Parturient Institute
Sed LLC
Arcu LLP
Fringilla LLC
Elit Etiam Laoreet Associates
Nunc Interdum Incorporated
Augue Foundation
Non Magna LLC
A Institute
Quam A Fels Industries
Integer Mollis Corp.
Enim Condimentum Ltd
Donec Fringilla PC
Amet Institute
Magna Incorporated
Fringilla Porttitor Incorporated
Ut Semper Foundation
Ac Industries

company 11 x | Read Only

Output

Action Output

#	Time	Action	Message	Duration / Fetch
597	11:02:51	SELECT company_name FROM company WHERE id IN (SELECT company_id FROM transaction	WHE... 70 row(s) returned	0.015 sec / 0.000 sec
598	11:03:37	SELECT company_name FROM company WHERE id IN (SELECT company_id FROM transaction	WHE... 70 row(s) returned	0.000 sec / 0.000 sec
599	11:03:53	SELECT company_name FROM company WHERE id IN (SELECT DISTINCT company_id FROM transaction...	70 row(s) returned	0.000 sec / 0.000 sec

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

```

39 • SELECT company_name
40 FROM company
41 WHERE id NOT IN (
42     SELECT DISTINCT company_id FROM transaction
43 );

```

Result Grid | Filter Rows: | Export: | Wrap C

company_name

○

Nivell 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.

```

47 • SELECT DATE(timestamp) AS data,
48     SUM(amount) AS total_vendes
49     FROM transaction
50     GROUP BY data
51     ORDER BY total_vendes DESC
52     LIMIT 5;
53

```

Result Grid			Filter Rows:	Export:
	data	total_vendes		
	2021-03-29	1564.87		
	2021-12-20	1532.36		
	2021-06-15	1469.90		
	2021-05-09	1463.73		
	2021-06-21	1443.11		




Exercici 2

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

```

54 • SELECT company.country,
55     AVG (transaction.amount) AS media_ventas
56 FROM transaction
57 JOIN company ON transaction.company_id=company.id
58 GROUP BY country
59 ORDER BY media_ventas DESC;

```

Result Grid   Filter Rows: <input type="text"/> Export:  Wrap Cell Coi		
	country	media_ventas
▶	United States	309.179412
	Ireland	277.308387
	United Kingdom	270.731700
	Canada	269.647869
	Sweden	260.615063
	Norway	254.216324
	Netherlands	253.017778
	Germany	244.203220
	Australia	232.052500
	Belgium	228.147692
	China	227.556667
	New Zealand	222.277273
	Italy	201.590000
	France	179.198333
	Spain	53.400000

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 subconsulta

```

64 • SELECT *
65 FROM transaction
66 JOIN company ON transaction.company_id=company.id
67 WHERE company.country = (
68     select country from company where company_name = 'Non Institute')
69 -- and company_name != 'Non Institute'
70 ;
71

```

Result Grid														
Filter Rows: <div></div> Export: <div></div> Wrap Cell Contents: <div></div>														
	id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined	id	company_name	phone	email	country
▶	2B928E1C-EC14-A760-0A75-871477649D6A	CcU-2980	b-2246	275	-41.0496	161.685	2021-08-10 08:14:49	383.73	0	b-2246	Sed Nunc Ltd	02 62 64 73 48	nibh@yahoo.org	United Kingdom
	ACD2011A-A2B1-C365-41E1-2AB00C65147A	CcU-2980	b-2246	275	-54.4792	-82.7974	2022-03-05 20:41:20	60.07	1	b-2246	Sed Nunc Ltd	02 62 64 73 48	nibh@yahoo.org	United Kingdom
	4334349E-CEB0-3D68-A4D4-FEB7718A1ACE	CcU-3092	b-2310	275	-20.4859	150.87	2021-05-03 22:37:23	458.74	0	b-2310	Non Magna LLC	06 71 73 13 17	nisl.quisque.fringilla@hotmail.ca	United Kingdom
	BC2B9A38-77B4-28CD-1FE8-14DED863E773	CcU-3092	b-2310	275	-78.0295	18.5295	2021-10-18 07:27:35	477.95	1	b-2310	Non Magna LLC	06 71 73 13 17	nisl.quisque.fringilla@hotmail.ca	United Kingdom
	147983D2-87B4-C7B8-4CE3-8D7C2D685A8B	CcU-2994	b-2326	133	66.2672	172.399	2021-08-09 00:58:07	309.45	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	152598C2-029D-0684-4B66-91EDF393EBFF	CcU-2994	b-2326	126	-67.0189	-141.672	2021-07-05 03:10:00	395.43	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	1B636858-A2E8-7C69-D9C9-C54535DAPD1	152598C2-029D-0684-4B66-91EDF393EBFF			70.2543	-13.1336	2021-07-06 08:46:46	195.06	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	20418DCE-8804-EE98-8D7A-A95C1BFD8F5C	CcU-2994	b-2326	126	-79.1145	1.51461	2022-01-03 15:59:29	479.52	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	23988376-4C0F-137A-C7F6-3180A188A3D3	CcU-2994	b-2326	126	23.6174	137.222	2021-08-26 06:04:05	43.90	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	267C4A86-7BA7-1C5E-0718-2824983C87D0	CcU-2994	b-2326	126	-17.5259	104.915	2021-10-01 21:08:53	122.63	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	3142C33E-8387-49E4-EE2D-29CA834B19D0	CcU-2994	b-2326	126	-67.8476	-119.978	2021-04-06 17:24:44	91.59	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	3578688E-7B1D-8887-3BC7-20B8673AA31E	CcU-2994	b-2326	126	87.0665	-22.7339	2021-07-26 22:59:24	303.60	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	360C7814-F7AF-843A-0946-AB3802683C86	CcU-2994	b-2326	116	-7.93005	-79.0733	2021-08-21 10:19:58	494.82	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	391E1CFD-D653-E458-A729-F2E893247B58	CcU-2994	b-2326	118	60.5512	103.904	2021-10-09 00:50:38	271.27	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	3C4D7C2A-A402-8941-625A-D64CA53526E8	CcU-2994	b-2326	117	23.1627	-10.381	2021-04-25 19:11:52	441.27	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	3ED634C2-01CA-D6E9-2D8D-24B53A7912F7	CcU-4219	b-2326	137	69.0549	96.5033	2021-03-29 11:38:38	478.54	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	3FEC4131-9BED-2EAE-1776-82674C80D0B8	CcU-2994	b-2326	126	-7.28469	179.063	2021-07-25 04:59:17	393.42	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	41C13F08-471E-D475-3E14-760DF3F79E42	CcU-4219	b-2326	138	-51.7289	55.3294	2022-01-16 16:48:55	45.63	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	41EC591D-808E-D85C-F05F-08BC3DE7A618	CcU-2994	b-2326	126	5.38535	-78.3917	2022-01-06 07:47:39	335.54	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	4217E857-ID51-5D25-8645-EC24D23C8759	CcU-2994	b-2326	129	65.4733	-20.2735	2021-04-23 13:07:58	193.33	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	45CA3E45-6B42-CAC4-7683-EBB69D52363E	CcU-4219	b-2326	140	85.7055	36.1497	2021-04-29 06:17:02	149.89	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	49CD105D-E569-3733-C8C8-3908ED7E1838	CcU-3393	b-2326	108	-47.8783	168.275	2021-12-24 23:43:59	411.81	0	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	4ABE3D77-8F86-12D3-E1C5-22663D37C199	CcU-3120	b-2326	273	-63.6087	69.6023	2021-11-13 04:18:28	38.02	1	b-2326	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom
	4B74944B-0173-2C7F-48CF-7D1A26F911F55	CcU-1904	b-7106	128	76.6074	53.4543	2022-02-12 14:27:28	304.43	0	b-7106	Enim Conditum Ltd	09 55 51 66 25	imperdiet.non.vestibulum@yahoo.net	United Kingdom

Result 16 x

Read Only

Output

Action

Time

Action

Message

Duration / Fetch

602

11:24:04

SELECT company_name, COUNT(transaction.id) AS num_transactions, CASE WHEN...

101 row(s) returned

0.016 sec / 0.000 sec

603

11:24:13

SELECT company_name, COUNT(transaction.id) AS num_transactions, CASE WHEN...

101 row(s) returned

0.000 sec / 0.000 sec

604

11:25:56

SELECT * FROM transaction JOIN company ON transaction_id=company_id WHERE company...

100 row(s) returned

0.000 sec / 0.000 sec

- Mostra el llistat aplicant solament subconsultes.


```

62 SELECT *
63 FROM transaction
64 WHERE transaction.company_id IN (
65     SELECT id
66     FROM company
67     WHERE company.country = (
68         SELECT country FROM company WHERE company_name = 'Non Institute')
69     -- and company_name != 'Non Institute'
70 );
71

```

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
28928E1C-EC14-A760-0A75-871477649D6A	CcJ-2980	b-2246	275	-41.0496	161.685	2021-08-10 08:14:49	383.73	0
ACD2011A-A2B1-C365-11E1-2AB00C65147A	CcJ-2980	b-2246	275	-54.4792	-82.7974	2022-03-05 20:41:20	60.07	1
4334349E-CEBD-3D68-A4D4-FEB7718A1ACE	CcJ-3092	b-2310	275	-20.4859	150.87	2021-05-03 22:37:23	458.74	0
8C2B9A38-7764-28CD-1FE9-14DE0863E773	CcJ-3092	b-2310	275	-78.0295	18.5295	2021-10-18 07:27:35	477.95	1
147983D2-878A-C7B6-4CE3-8D7C2DE85A8B	CcJ-2994	b-2326	133	66.2672	172.399	2021-08-09 00:58:07	309.45	0
152598C2-029D-0684-4B66-91EDF393E8FF	CcJ-2994	b-2326	126	-67.0189	-141.672	2021-07-05 03:10:00	395.43	0
18636858-A2E8-7C69-09C9-C54535DAFD3B	CcJ-2994	b-2326	131	70.2543	-13.1336	2021-07-06 08:48:46	195.06	0
204180E5-8804-8E96-BD7A-A95C1BFDF5C	CcJ-2994	b-2326	126	-79.1145	1.51481	2022-01-03 15:59:29	479.52	0
23988576-6C0E-137A-C2F6-3180A188A2D3	CcJ-2994	b-2326	126	23.6174	137.222	2021-08-26 06:04:05	43.90	0
267C4A86-7BA7-1C5E-0718-2824983C87D0	CcJ-2994	b-2326	126	-17.5259	104.915	2021-10-01 21:08:53	122.63	0
3142C93E-63B7-49E4-EE2D-29CA834B198D	CcJ-2994	b-2326	126	-67.8476	-119.978	2021-04-06 17:24:44	91.59	0
3578688E-7B1D-B887-3BC7-20B8673AA31E	CcJ-2994	b-2326	126	87.0665	-22.7339	2021-07-26 22:59:24	303.60	0
360C7B14-F7AF-B43A-0946-AB38D2683C86	CcJ-2994	b-2326	116	-7.93005	-79.0733	2021-08-21 10:19:58	494.82	0
391E1CFD-D653-E45B-A729-F2EB93247B58	CcJ-2994	b-2326	118	60.5512	103.904	2021-10-09 00:50:38	271.27	0
3C4D7C2A-A402-B941-625A-D64CA53526E8	CcJ-2994	b-2326	117	23.1627	-10.381	2021-04-25 19:11:52	441.27	0
3ED634C2-01CA-D6E9-2DBD-24B53A7912F7	CcJ-4219	b-2326	137	69.0549	96.5033	2021-03-29 11:38:38	478.54	0
3FEC4131-98ED-2EA6-1776-82674C80C0B8	CcJ-2994	b-2326	126	-7.28469	179.063	2021-07-25 04:59:17	393.42	0
41C13F08-471E-0475-3E14-760DF3F9842	CcJ-4219	b-2326	138	-51.7289	55.3294	2022-01-16 16:48:55	45.63	0
41EC591D-808E-085C-F03F-086C3DE7A618	CcJ-2994	b-2326	126	5.38535	-78.3917	2022-01-06 07:47:39	335.54	0
42176857-1D51-9D35-B645-EC24D23C8759	CcJ-2994	b-2326	129	65.4733	-20.2735	2021-04-23 13:07:58	193.33	0
45CA3E45-6B42-CAC4-7683-EBB69D523B3E	CcJ-4219	b-2326	140	85.7055	36.1497	2021-04-29 06:17:02	149.89	0
4604142E-FF5B-3333-0000-000000000000	CcJ-2994	b-2326	126	-27.0303	128.336	2021-12-24 00:43:06	441.81	0

Nivell 3

Exercici 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.

```

71
72 • SELECT company.company_name,
73       company.phone,
74       company.country,
75       DATE(transaction.timestamp) AS fecha , transaction.amount
76 FROM transaction
77 JOIN company ON transaction.company_id=company.id
78 WHERE transaction.amount BETWEEN 100 AND 200
79 AND DATE (transaction.timestamp) IN ('2021-04-29', '2021-07-20','2022-03-13')
80 ORDER BY transaction.amount DESC;
81

```

company_name	phone	country	fecha	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 Conditum 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

#	Time	Action	Message	Duration / Fetch
598	11:03:37	SELECT company_name FROM company WHERE id IN (SELECT company_id FROM transaction WHERE...	70 row(s) returned	0.000 sec / 0.000 sec
599	11:03:53	SELECT company_name FROM company WHERE id IN (SELECT DISTINCT company_id FROM transaction...	70 row(s) returned	0.000 sec / 0.000 sec
600	11:19:50	SELECT company.company_name, company.phone, company.country, DATE(transaction.timestamp) AS fecha , tr...	5 row(s) returned	0.000 sec / 0.000 sec

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.

```

95 • SELECT company.company_name,
96       COUNT(transaction.id) AS num_transaccions,
97       CASE
98       WHEN COUNT(transaction.id) > 4 THEN 'Més de 4 transaccions'
99       ELSE '4 transaccions o menys'
100      END AS classificacio
101 FROM company
102 JOIN transaction ON company.id = transaction.company_id
103 GROUP BY company.company_name
104 ORDER BY num_transaccions DESC;
105

```

company_name	num_transaccions	classificacio
Nunc Interdum Incorporated	105	Més de 4 transaccions
Ut Semper Foundation	59	Més de 4 transaccions
Enim Conditum Ltd	57	Més de 4 transaccions
Arcu LLP	56	Més de 4 transaccions
Lorem Eu Incorporated	54	Més de 4 transaccions
Malesuada PC	52	Més de 4 transaccions
Non Institute	30	Més de 4 transaccions
Ac Fermentum Incorporated	2	4 transaccions o menys
Magna A Neque Industries	2	4 transaccions o menys
Fusce Corp.	2	4 transaccions o menys
Convallis In Incorporated	2	4 transaccions o menys
Ante Iaculis Nec Foundation	2	4 transaccions o menys
Donec Ltd	2	4 transaccions o menys
Sed Nunc Ltd	2	4 transaccions o menys
Amet Nulla Donec Corporation	2	4 transaccions o menys
Nascetur Ridiculus Mus Inc.	2	4 transaccions o menys
Vestibulum Lorem PC	2	4 transaccions o menys

#	Time	Action	Message	Duration / Fetch
601	11:23:54	SELECT company.company_name, COUNT(transaction.id) AS num_transaccions, CASE WHEN...	101 row(s) returned	0.000 sec / 0.000 sec
602	11:24:04	SELECT company.company_name, COUNT(transaction.id) AS num_transaccions, CASE WHEN...	101 row(s) returned	0.016 sec / 0.000 sec
603	11:24:13	SELECT company.company_name, COUNT(transaction.id) AS num_transaccions, CASE WHEN...	101 row(s) returned	0.000 sec / 0.000 sec