

Álvaro Míguez

Sprint 02 – Corrección 29/04

- Exercici 1

Mostra totes les transaccions realitzades per empreses d'Alemanya.

```
1 • USE transactions;
2 • #ex1
3
4 • SELECT * FROM transaction WHERE company_id IN (SELECT id FROM company WHERE country ="germany") order by amount desc;
5
```

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined
263035AA-8758-E413-8CC4-6D8F81B8F899	CcU-4338	b-2302	223	36.61	83.1953	2021-06-21 11:23:01	499.23	0
1753A288-9FC1-52E6-5C39-A1FFB97B0D3A	CcU-4345	b-2302	222	57.9422	-114.729	2021-08-17 05:32:08	497.84	0
9FB83D61-03C2-E5B8-4BC3-6CC83C718D34	CcU-3540	b-2566	267	75.2117	-171.045	2021-04-19 21:33:41	490.19	1
241827A6-E87C-6DA3-5AC9-8BCFD42B7D2A	CcU-4849	b-2302	190	-12.1172	-175.322	2021-08-04 04:44:35	487.64	0
BF0BA288-355D-412E-089C-8152516D0C965	CcU-4219	b-2302	171	67.3245	114.092	2021-03-26 13:46:28	485.31	0
65F57592-832E-1D2E-3466-57D7F7691D0D	CcU-4849	b-2302	178	-48.6612	67.8562	2021-06-15 06:26:04	476.75	0
1B521826-586D-5A86-5364-6EB6A5CC21B7	CcU-4226	b-2302	231	-53.4613	49.1484	2021-08-14 02:39:50	476.33	0
BA18E1BA-AAC8-FD6C-3C74-A7E375AE85D	CcU-4219	b-2302	143	2.49915	-16.174	2021-08-14 00:39:56	474.76	0
5AB20418-79A8-DF6C-D446-8CF548CDED8	CcU-4541	b-2302	210	65.1786	-151.454	2021-08-31 05:44:29	474.70	0
97A22779-F07C-91C1-2331-8CBAD44EBA4B	CcU-3085	b-2306	275	43.0794	84.9662	2021-12-02 03:22:01	466.55	1
1C383CC4-8919-7616-6A57-EEBDD7B76B8B	CcU-4415	b-2302	217	81.1737	62.8835	2021-09-27 16:07:34	462.35	0
369213C7-8D65-0715-6644-D5E4F9BD9914	CcU-4219	b-2302	147	88.7859	-148.023	2021-12-29 18:54:29	458.66	0
BC9C5393-485B-418E-6E9C-CB454E934224	CcU-4219	b-2302	144	29.2279	164.656	2021-06-23 10:57:10	458.52	0
3A3E00C1-C191-02EF-AD8E-42C9DA64HE4A	CcU-4849	b-2302	175	0.340013	174.033	2021-11-10 19:14:50	451.66	0
C40174D7-1EB3-29B2-2F70-53236CA24369	CcU-4219	b-2302	145	-19.4069	160.661	2021-06-14 09:53:07	444.82	0
A8287A4A-9176-A612-2488-6B8D8384766D	CcU-4513	b-2302	210	-54.0967	-44.9177	2021-09-30 01:39:45	436.59	0
66179D5C-98BD-5E13-9249-BDC1A35406FC	CcU-4373	b-2302	220	-7.46835	108.336	2021-09-27 12:50:55	433.66	0
0A476ED9-0C13-1962-F87B-D3563924B539	CcU-4359	b-2302	221	-56.4901	114.801	2022-02-26 20:33:54	430.49	0
33525F74-486A-C19F-7D23-A8D78668B7C4	CcU-4492	b-2302	212	10.3105	13.9999	2021-12-15 12:22:03	423.71	0
B62D17A8-456A-A5B2-88DB-25314036778E	CcU-4212	b-2302	232	-34.5861	-36.1162	2021-05-12 23:22:59	421.00	0
A6240105-79C6-DD54-28A1-0164B6CE6767	CcU-4849	b-2302	179	-29.9044	-179.334	2022-02-26 17:04:53	420.59	0
3E495EC1-E1C5-26F1-0E3E-2D13EAA2593A	CcU-4282	b-2302	227	-50.5725	-172.508	2022-03-03 14:29:15	417.70	0
B819787C-ACBC-786D-FA21-3C1C7383027B	CcU-4219	b-2302	174	-44.0068	-70.5731	2021-10-25 21:26:02	411.64	0
6AAA5BDC-C19A-82CC-EF22-70DEE21ACF9E	CcU-4219	b-2302	169	46.5654	172.072	2021-11-15 20:17:28	399.33	0
B03C0BC7-28F4-D474-8928-523B19A93E7C	CcU-4499	b-2302	211	89.0823	-97.6283	2021-06-28 08:39:34	397.29	0
5E7BBA02-A5B6-C734-D7B7-241D674254A9	CcU-3176	b-2358	272	-13.0019	-115.791	2021-07-07 02:25:17	396.15	0
D39499A3-A9B6-36B9-2B8D-25AF340EEDB	CcU-4254	b-2302	229	58.3625	-138.102	2021-11-15 10:02:01	393.51	0
A9225721-ID92-9A16-A4B4-751134C5E702	CcU-4380	b-2302	220	86.4804	59.8235	2021-12-12 16:40:06	390.10	0
14CAE5B5-8FB1-3E4A-4CR5-0EA4167534F4	CcU-4849	b-2302	189	-53.6202	93.0533	2021-12-31 00:29:42	388.04	0
65A7C3AC-FFFC-3495-95B1-52C38507E523	CcU-4443	b-2302	215	-78.2398	-9.2237	2021-12-08 15:29:30	387.27	0
1B117D49-936C-8A6C-E94B-30C3293A239	CcU-4219	b-2302	163	-75.099	109.034	2021-05-09 23:56:04	371.35	0
41932C77-45B5-C786-6B3F-DBB619B2D535	CcU-4219	b-2302	142	-8.37247	-67.8776	2022-02-12 09:12:05	358.36	0
E55E6D8D-788D-DC86-9E7E-22B632C3D313	CcU-3078	b-2302	275	16.2686	-91.5667	2021-05-31 12:59:35	356.09	1
A8E203DA-9A2D-2DA7-29E3-085598BEC095	CcU-4268	b-2302	228	2.19926	75.1689	2022-01-25 14:16:47	355.63	0
BE8BC256-9696-1AAB-2C73-D2F3775301A9	CcU-4219	b-2302	159	-34.1831	-7.04756	2021-04-12 15:28:54	346.46	0

transaction 13 x

Output

Action Output

#	Time	Action	Message
709	10:29:19	(# SELECT COUNT(amount) # FROM transaction # WHERE company_id = company_id #) AS total_orders #FROM company #WHERE countr...	Error Code: 1064. You have an error in your SQL synt...
710	10:30:07	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) ...	70 row(s) returned
711	10:48:43	SELECT company_id, SUM(amount), count(*) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (S...	70 row(s) returned
712	10:49:09	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT i...	70 row(s) returned
713	10:49:15	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT i...	70 row(s) returned
714	12:26:57	SELECT * FROM transaction WHERE company_id IN (SELECT id FROM company WHERE country ="germany") order by amount desc LIMIT 0, 50000	118 row(s) returned

Función sencilla que me permite comprar las dos tablas para poder filtrar por país los resultados de la tabla de transacciones. Hubiera preferido poder mostrar los nombres de las empresas, pero no conseguí mostrar ambas tablas correctamente.

- Exercici 2

Màrqueting està preparant alguns informes de tancaments de gestió, et demanen que els passis un llistat de les empreses que han realitzat transaccions per una suma superior a la mitjana de totes les transaccions

```
19  #ex 2
20  SELECT
21      company_id, SUM(amount)
22  FROM
23      transaction
24  WHERE
25      amount > (SELECT
26                  AVG(amount)
27                  FROM
28                      transaction)
29      AND company_id IN (SELECT
30                          company_id
31                          FROM
32                              company)
33  GROUP BY company_id
34  ORDER BY SUM(amount) DESC;
```

company_id	SUM(amount)
b-2302	18484.48
b-2346	12964.38
b-2494	12221.18
b-2326	10885.11
b-2362	10664.44
b-2278	9679.37
b-2618	7328.62
b-2398	946.15
b-2310	936.69
b-2410	922.42
b-2454	887.27
b-2458	885.04
b-2522	884.56
b-2258	868.12
b-2510	817.24
b-2406	815.58
b-2490	810.71

Result 14 x

Output

#	Time	Action	Message
710	10:30:07	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) ...	70 row(s) returned
711	10:48:43	SELECT company_id, SUM(amount), count(*) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (S...	70 row(s) returned
712	10:49:09	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT I...	70 row(s) returned
713	10:49:15	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT I...	70 row(s) returned
714	12:26:57	SELECT * FROM transaction WHERE company_id IN (SELECT id FROM company WHERE country = "germany") order by amount desc LIMIT 0, 50000	118 row(s) returned
715	12:28:12	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) ...	70 row(s) returned

Esta es la primera versión de la formula, comparo el amount a la media (avg(amount) from transaction) y hago la suma para poder agrupar por empresa. De esta manera, conseguimos los 70 resultados por id de empresa. Hubiera preferido poder mostrar los nombres de las empresas, pero no conseguía que el resultado saliese correctamente.

```
35  SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT id FROM company) GROUP BY company_id ORDER BY SUM(amount) desc;
```

company_id	SUM(amount)
b-2302	18484.48
b-2346	12964.38
b-2494	12221.18
b-2326	10885.11
b-2362	10664.44
b-2278	9679.37
b-2618	7328.62
b-2398	946.15
b-2310	936.69
b-2410	922.42
b-2454	887.27
b-2458	885.04
b-2522	884.56
b-2258	868.12
b-2510	817.24
b-2406	815.58
b-2490	810.71

Result 15 x

Output

#	Time	Action	Message
711	10:48:43	SELECT company_id, SUM(amount), count(*) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (S...	70 row(s) returned
712	10:49:09	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT I...	70 row(s) returned
713	10:49:15	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT I...	70 row(s) returned
714	12:26:57	SELECT * FROM transaction WHERE company_id IN (SELECT id FROM company WHERE country = "germany") order by amount desc LIMIT 0, 50000	118 row(s) returned
715	12:28:12	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) ...	70 row(s) returned
716	12:28:54	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT I...	70 row(s) returned

Esta es la 2ª versión de la formula, que después de analizarla es exactamente la misma. Solo experimentando en cómo escribir y usar el formateo incluido en mysql workbench.

- Exercici 3

El departament de comptabilitat va perdre la informació de les transaccions realitzades per una empresa, però no recorden el seu nom, només recorden que el seu nom iniciava amb la lletra c. Com els pots ajudar? Comenta-ho acompanyant-ho de la informació de les transaccions.

```
38 #ex 3
39
40 SELECT
41 *,
42 (
43     SELECT company_name
44     FROM company
45     WHERE company_name LIKE "C%"
46     AND company.id = company_id
47 ) as company
48 FROM transaction
49 where (
50     SELECT company_name
51     FROM company
52     WHERE company_name LIKE "C%"
53     AND company.id = company_id
54 ) is not null;
```

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined	company
00D2E608-5C9E-D1B3-4999-899F43AD735A	CcU-2959	b-2234	275	9.68811	130.282	2021-04-17 05:30:17	252.47	1	Convallis In Incorporated
439F4F6A-57C7-3A59-6038-AD7133887522	CcU-3449	b-2514	268	-13.9867	-104.268	2021-03-18 05:42:48	60.93	0	Cras Consulting
5C3A8A3D-8974-40A6-A8AF-C1F7AA687C94	CcU-3519	b-2554	267	15.1828	165.662	2021-07-23 15:35:14	158.05	1	Cras Vehicula Aliquet Industries
8D895ADO-5501-2A9C-24DD-2EAE7AEF1C5	CcU-3519	b-2554	267	8.58711	-34.6616	2021-10-27 19:43:57	181.87	0	Cras Vehicula Aliquet Industries
AB069F53-965E-A2A8-CE06-CA8C4FD92501	CcU-2959	b-2234	275	1.64819	-158.007	2021-04-15 13:37:18	60.99	0	Convallis In Incorporated
ED1CFB7D-E626-CE54-57A1-A03677885E1F	CcU-3449	b-2514	268	9.75306	-134.718	2021-11-28 23:27:04	230.41	1	Cras Consulting

Este ejercicio fue complicado, pero al final di con esta fórmula que funciona. Dato curioso, si después del primer paréntesis aun poniendo as company, si luego le pongo que me haga el not null a company, no funciona, de ahí que lo tenga que poner como se ve en la imagen, poniendo todo el paréntesis entero is not null para que funcione.

- Exercici 4

Van eliminar del sistema les empreses que no tenen transaccions registrades, lliura el llistat d'aquestes empreses.

```
56      #ex4
57
58      SELECT DISTINCT
59          company_name, company.id
60      FROM
61          company
62      WHERE
63          NOT EXISTS( SELECT
64                      *
65                      FROM
66                          transaction
67                      WHERE
68                          company.id = company_id);
69
```

Result Grid

company_name	id
NULL	NULL

company 18 x

Output

Action Output

#	Time	Action	Message
✓ 714	12:26:57	SELECT * FROM transaction WHERE company_id IN (SELECT id FROM company WHERE country = "germany") order by amount desc LIMIT 0, 50000	118 row(s) returned
✓ 715	12:28:12	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) ...	70 row(s) returned
✓ 716	12:28:54	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT i...	70 row(s) returned
✓ 717	12:37:07	SELECT *, (SELECT company_name FROM company WHERE company.id = company_id AND country = (SELECT country FROM comp...	100 row(s) returned
✓ 718	12:37:16	SELECT *, (SELECT company_name FROM company WHERE company_name LIKE "C%" AND company.id = company_id) as compan...	6 row(s) returned
✓ 719	12:43:14	SELECT DISTINCT company_name, company.id FROM company WHERE NOT EXISTS(SELECT * FROM transaction ...	0 row(s) returned

Usando la formula estamos preguntando que empresas no existen dentro de la hoja de transacciones, y en caso de no existir que nos diga cuales son. En este caso no responde nada, de manera que no se encuentran empresas que hayan sido eliminadas.

Nivel 2

Exercici 1

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.

```
70 #ex 2.1
71
72 #70 resultados
73
74 SELECT
75 *,
76 (
77     SELECT company_name
78     FROM company
79     WHERE company.id = company_id
80     AND country = (SELECT country FROM company WHERE company_name = "Non institute")
81     AND company_name not in ("non institute")
82 ) as results
83 FROM transaction
84 where (
85     SELECT company_name
86     FROM company
87     WHERE company.id = company_id
88     AND country = (SELECT country FROM company WHERE company_name = "Non institute")
89     AND company_name not in ("non institute")
90 ) is not null;
```

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined	results
1479B3D2-B7BA-C7B8-4CE3-8D7C2DE85A8B	CcU-2994	b-2326	133	66.2672	172.399	2021-08-09 00:58:07	309.45	0	Enim Condimentum Ltd
152598C2-029D-D684-4B66-91EDF393EBFF	CcU-2994	b-2326	126	-67.0189	-141.672	2021-07-05 03:10:00	395.43	0	Enim Condimentum Ltd
1B636858-A2E8-7C69-D9C9-C5453DAFD3B	CcU-2994	b-2326	131	70.2543	-13.1336	2021-07-06 08:48:46	195.06	0	Enim Condimentum Ltd
20418DE5-8804-8E98-8D7A-A95C1BFD8F5C	CcU-2994	b-2326	126	-79.1145	1.51481	2022-01-03 15:59:29	479.52	0	Enim Condimentum Ltd
23968576-6C0E-137A-C2F6-3180A188A2D3	CcU-2994	b-2326	126	23.6174	137.222	2021-08-26 06:04:05	43.90	0	Enim Condimentum Ltd
267C4A86-7BA7-1C5E-0718-2824983C87DD	CcU-2994	b-2326	126	-17.5259	104.915	2021-10-01 21:08:53	122.63	0	Enim Condimentum Ltd
2A5A3001-104F-1D1F-7852-58A80186986F	CcU-3169	b-2354	272	-67.2525	-142.557	2022-02-27 18:35:15	30.76	0	Ac Libero Inc.
28928E1C-EC14-A760-0A75-871477649D6A	CcU-2980	b-2246	275	-41.0496	161.685	2021-08-10 08:14:49	383.73	0	Sed Nunc Ltd
3142C93E-83B7-49E4-EE2D-29CA834B198D	CcU-2994	b-2326	126	-67.8476	-119.978	2021-04-06 17:24:44	91.59	0	Enim Condimentum Ltd
3578688E-7B1D-B887-3BC7-20B8673AA31E	CcU-2994	b-2326	126	87.0665	-22.7339	2021-07-26 22:59:24	303.60	0	Enim Condimentum Ltd
360C7814-F7AF-B43A-0946-AB38D2683C86	CcU-2994	b-2326	116	-7.93005	-79.0733	2021-08-21 10:19:58	494.82	0	Enim Condimentum Ltd
391E1CFD-D653-E458-A729-F2EB93247B58	CcU-2994	b-2326	118	60.5512	103.904	2021-10-09 00:50:38	271.27	0	Enim Condimentum Ltd
3C4D7C2A-A402-B941-625A-D64CA53526E8	CcU-2994	b-2326	117	23.1627	-10.381	2021-04-25 19:11:52	441.27	0	Enim Condimentum Ltd
3ED634C2-01CA-D6E9-2DBD-24B53A7912F7	CcU-4219	b-2326	137	69.0549	96.5033	2021-03-29 11:38:38	478.54	0	Enim Condimentum Ltd
3FEC4131-9BED-2EA6-1776-82674C80DD8B	CcU-2994	b-2326	126	-7.28469	179.063	2021-07-25 04:59:17	393.42	0	Enim Condimentum Ltd

Result 19 x

Output

Action Output

#	Time	Action	Message
715	12:28:12	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) ...	70 row(s) returned
716	12:28:54	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT i...	70 row(s) returned
717	12:37:07	SELECT *, (SELECT company_name FROM company WHERE company_id = company_id AND country = (SELECT country FROM comp...	100 row(s) returned
718	12:37:16	SELECT *, (SELECT company_name FROM company WHERE company_name LIKE "C%" AND company_id = company_id) as compan...	6 row(s) returned
719	12:43:14	SELECT DISTINCT company_name, company_id FROM company WHERE NOT EXISTS(SELECT * FROM transaction ...	0 row(s) returned
720	12:44:40	SELECT *, (SELECT company_name FROM company WHERE company_id = company_id AND country = (SELECT country FROM comp...	70 row(s) returned

Aplicamos el lateral para sacar el nombre de las compañías, su ID y su país. Lo limitamos pidiendo que nos devuelva el país de donde sale Non Institute con la siguiente formula: "AND country = (select country from company where company_name = "Non institute")" Con esa fórmula conseguimos que nos filtre ya por United Kingdom. Además, para evitar resultados mezclados con los pedidos de Non Institute aplico la siguiente formula "AND company_name not in ("non institute"))". Así solo se ven los resultados del resto de empresas.

Álvaro Míguez

Sprint 02 – Corrección 29/04

Si quisiéramos mostrar los resultados de Non Institute dentro de United Kingdom solo tenemos que quitar la siguiente línea de código. “AND Company_name not in (“non institute”).

De esta manera conseguimos 100 resultados en lugar de 70 y todos los pedidos de United Kingdom.

```
92 # 100 resultados
93
94 SELECT
95 *,
96 (
97     SELECT company_name
98     FROM company
99     WHERE company.id = company_id
100     AND country = (SELECT country FROM company WHERE company_name = "Non institute")
101 ) as results
102 FROM transaction
103 where (
104     SELECT company_name
105     FROM company
106     WHERE company.id = company_id
107     AND country = (SELECT country FROM company WHERE company_name = "Non institute")
108 ) is not null;
```

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined	results
0668296C-CDB9-A883-76BC-2E4C44F8C8AE	CcU-3743	b-2618	265	-34.3593	-100.556	2022-01-26 02:07:14	394.18	0	Non Institute
1017AA59-3D5F-7A4C-1992-D151A8D1FA0A	CcU-3701	b-2618	267	4.27645	-101.554	2021-11-01 01:02:11	447.11	0	Non Institute
147983D2-87BA-C7BB-4CE3-8D7C2DE85ABB	CcU-2994	b-2326	133	66.2672	172.399	2021-08-09 00:58:07	309.45	0	Enim Condimentum Ltd
152598C2-029D-D684-4B66-91EDF393EBFF	CcU-2994	b-2326	126	-67.0189	-141.672	2021-07-05 03:10:00	395.43	0	Enim Condimentum Ltd
18D648AB-7D54-A3E8-2DBA-2D8D2991CA43	CcU-3771	b-2618	263	-67.118	-174.141	2021-11-02 03:08:14	305.02	0	Non Institute
1A9B5411-64D8-DEC4-AC74-43E235AAEFC1	CcU-3687	b-2618	267	44.3314	149.168	2021-08-22 23:51:51	306.96	0	Non Institute
1B636B58-A2E8-7C69-D9C9-C54535DAFD3B	CcU-2994	b-2326	131	70.2543	-13.1336	2021-07-06 08:48:46	195.06	0	Enim Condimentum Ltd
1DE927AB-29A8-654F-3372-43971B6844AA	CcU-3659	b-2618	267	79.9467	90.3733	2021-08-05 15:52:25	440.13	0	Non Institute
1FB125A8-0901-63AC-E2B7-349E5974FBAD	CcU-3722	b-2618	267	-44.4339	-82.0844	2022-02-16 14:33:25	415.11	0	Non Institute
20418DE5-8804-8E9B-8D7A-A95C1BFD8F5C	CcU-2994	b-2326	126	-79.1145	1.51481	2022-01-03 15:59:29	479.52	0	Enim Condimentum Ltd
22C9EC22-45FC-72C8-63CE-5FA99A24E770	CcU-3645	b-2618	267	28.4439	-11.3959	2021-06-11 16:08:49	196.71	0	Non Institute
239B8576-6C0E-137A-C2F6-3180A188A2D3	CcU-2994	b-2326	126	23.6174	137.222	2021-08-26 06:04:05	43.90	0	Enim Condimentum Ltd
267C4A86-7BA7-1C5E-0718-2824983C87DD	CcU-2994	b-2326	126	-17.5259	104.915	2021-10-01 21:08:53	122.63	0	Enim Condimentum Ltd
2A5A3001-104F-1D1F-7852-5BA80186986F	CcU-3169	b-2354	272	-67.2525	-142.557	2022-02-27 18:35:15	30.76	0	Ac Libero Inc.
2B928E1C-EC14-A760-0A75-871477649D6A	CcU-2980	b-2246	275	-41.0496	161.685	2021-08-10 08:14:49	383.73	0	Sed Nunc Ltd
2F499B4D-4DC7-B337-010D-8B7471812A80	CcU-3785	b-2618	262	-25.2248	72.2735	2021-04-10 15:14:14	363.51	0	Non Institute
2F74E99B-9337-7F74-5208-5DEC81A174FD	CcU-3750	b-2618	265	75.0042	-64.1653	2021-06-04 16:40:30	475.06	0	Non Institute
3142C93E-83B7-49E4-EE2D-29CA834B198D	CcU-2994	b-2326	126	-67.8476	-119.978	2021-04-06 17:24:44	91.59	0	Enim Condimentum Ltd

Result 20 x

Output

Action Output

#	Time	Action	Message
✓ 716	12:28:54	SELECT company_id, SUM(amount) FROM transaction WHERE amount > (SELECT AVG(amount) FROM transaction) AND company_id IN (SELECT ...	70 row(s) returned
✓ 717	12:37:07	SELECT *, (SELECT company_name FROM company WHERE company_id = company_id AND country = (SELECT country FROM comp...	100 row(s) returned
✓ 718	12:37:16	SELECT *, (SELECT company_name FROM company WHERE company_name LIKE "C%" AND company_id = company_id) as compan...	6 row(s) returned
✓ 719	12:43:14	SELECT DISTINCT company_name, company_id FROM company WHERE NOT EXISTS(SELECT * FROM transaction ...	0 row(s) returned
✓ 720	12:44:40	SELECT *, (SELECT company_name FROM company WHERE company_id = company_id AND country = (SELECT country FROM comp...	70 row(s) returned
✓ 721	12:45:11	SELECT *, (SELECT company_name FROM company WHERE company_id = company_id AND country = (SELECT country FROM comp...	100 row(s) returned

Exercici 2

El departament de comptabilitat necessita que trobis l'empresa que ha realitzat la transacció de major suma en la base de dades

```
111      #ex 2.2
112
113      SELECT
114      amount,
115      (
116          SELECT company_name
117          FROM company
118          WHERE company.id = company_id
119      ) AS company
120  FROM transaction
121  WHERE amount = (SELECT MAX(amount) FROM transaction);
```

Result Grid

amount	company
499.23	Nunc Interdum Incorporated

Result 21 x

Output

#	Time	Action	Message
717	12:37:07	SELECT *, (SELECT company_name FROM company WHERE company.id = company_id AND country = (SELECT country FROM comp...	100 row(s) returned
718	12:37:16	SELECT *, (SELECT company_name FROM company WHERE company_name LIKE "C%" AND company.id = company_id) as compan...	6 row(s) returned
719	12:43:14	SELECT DISTINCT company_name, company.id FROM company WHERE NOT EXISTS(SELECT * FROM transaction ...	0 row(s) returned
720	12:44:40	SELECT *, (SELECT company_name FROM company WHERE company.id = company_id AND country = (SELECT country FROM comp...	70 row(s) returned
721	12:45:11	SELECT *, (SELECT company_name FROM company WHERE company.id = company_id AND country = (SELECT country FROM comp...	100 row(s) returned
722	12:53:10	SELECT amount, (SELECT company_name FROM company WHERE company.id = company_id) AS company FROM transaction WHER...	1 row(s) returned


Aquí, pedimos que me de la información de amount de la tabla de transaction, en la 2ª parte de la formula le pedimos que me dé el Company_name y he optimizado la subquery utilizando max(amount).

Nivel 3

Exercici 1

S'estan establint els objectius de l'empresa per al següent trimestre, per la qual cosa necessiten una base sòlida per a avaluar el rendiment i mesurar l'èxit en els diferents mercats. Per a això, necessiten el llistat dels països la mitjana de transaccions dels quals sigui superior a la mitjana general.

```
131 #ex3.1
132 • SELECT
133     DISTINCT(country),
134     avg(amount)
135 FROM
136     company,
137     LATERAL
138     (SELECT amount, company_id
139      FROM transaction
140      WHERE transaction.company_id = company.id)
141 AS max_sale
142 WHERE (select avg (amount)) > (SELECT AVG(amount) from transaction)
143 GROUP BY country
144 ORDER BY AVG(amount) DESC;
```



country	avg(amount)
Germany	381.584909
Australia	380.288333
Sweden	378.252619
Ireland	376.804722
Belgium	373.523000
Norway	370.291515
Canada	368.958235
France	343.500000
New Zealand	329.566000
China	289.040000

Result 4 x

Output

Action Output

#	Time	Action	Message
19	18:13:07	SELECT * FROM transaction, LATERAL (SELECT company_name, company_id, country FROM company WHERE transaction.company_id = ...	70 row(s) returned
20	18:17:17	SELECT company_name, company_id FROM company WHERE (company_id) = (SELECT company_id FROM transaction ...	1 row(s) returned
21	18:19:43	SELECT country, avg(amount) FROM transaction, LATERAL (SELECT country, company_id, company_name FROM company WHERE tran ...	5 row(s) returned
22	18:19:58	SELECT avg(amount), country FROM company, LATERAL (SELECT avg(amount) over (partition by country) as global_avg FROM transaction ...	Error Code: 1054. Unknown column 'amount' in field list
23	18:20:03	SELECT DISTINCT(country), avg(amount) FROM company, LATERAL (SELECT amount, company_id FROM transaction WHERE transacti...	14 row(s) returned

Usamos el lateral esta vez para buscar la información en la tabla de company y complementamos con al de transaction. Hacemos la comparativa entre avg amount y el avg de transaction para obtener los resultados y damos con una lista de 14 países.

Después de hablar con Edu, me explica que de esta manera el avg amount no lo está haciendo por país del todo, sino que es una comparativa más genérica.

Para poder resolverlo debemos utilizar un HAVING para poder primero agrupar por país, luego hacer el average por país y compararlo al average general de la tabla de transaction y queda de la siguiente manera, con solo 5 resultados.

Álvaro Míguez
Sprint 02 – Corrección 29/04

```
147 • SELECT
148     country,
149     avg(amount)
150 FROM
151     transaction,
152     LATERAL
153     (SELECT country, company.id, company_name
154      FROM company
155      WHERE transaction.company_id = company.id)
156 AS max_sale
157 GROUP BY country
158 having AVG(amount) > (SELECT AVG(amount) FROM transaction)
159 ORDER BY AVG(amount) DESC;
160
```

Result Grid		Filter Rows:	Export:	Wrap Cell Content:
country	avg(amount)			
United States	309.179412			
Ireland	277.308387			
United Kingdom	270.731700			
Canada	269.647869			
Sweden	260.615063			

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.

```
163
164 • SELECT
165     company_id,
166     SUM(amount),
167     COUNT(*),
168     IF(COUNT(*) >= 4,
169         'más de cuatro pedidos',
170         'menos de cuatro pedidos') AS mas_o_menos
171 FROM
172     (SELECT
173         company_id, amount, user_id
174     FROM
175         transaction UNION SELECT
176         id, company_name, country
177     FROM
178         company) AS Allorders
179 GROUP BY company_id
180 ORDER BY COUNT(*) DESC
```

company_id	SUM(amount)	COUNT(*)	mas_o_menos
b-2302	25622.64999999999	106	más de cuatro pedidos
b-2346	16150.239999999998	60	más de cuatro pedidos
b-2326	14616.050000000007	58	más de cuatro pedidos
b-2278	14116.040000000001	57	más de cuatro pedidos
b-2362	14280.649999999996	55	más de cuatro pedidos
b-2494	15013.929999999997	53	más de cuatro pedidos
b-2618	8911.240000000003	31	más de cuatro pedidos
b-2250	290.26	3	menos de cuatro pedidos
b-2386	586.12	3	menos de cuatro pedidos
b-2298	703.6800000000001	3	menos de cuatro pedidos

Result 7 x

Output

#	Time	Action	Message
22	18:19:58	SELECT avg(amount), country FROM company, LATERAL (SELECT avg(amount) over (partition by country) as global_avg FROM transaction ...	Error Code: 1054. Unkinc
23	18:20:03	SELECT DISTINCT(country), avg(amount) FROM company, LATERAL (SELECT amount, company_id FROM transaction WHERE transacti...	14 row(s) returned
24	18:37:03	select country from company group by country LIMIT 0, 1000	15 row(s) returned
25	18:38:26	SELECT country, avg(amount) FROM transaction, LATERAL (SELECT country, company id, company_name FROM company WHERE tran...	5 row(s) returned
26	18:40:09	SELECT company_id, SUM(amount), COUNT(*), IF(COUNT(*) >= 4, 'más de cuatro pedidos', 'menos de cuatro pedidos') AS mas_o_menos	100 row(s) returned

Este ejercicio corregido por Javi, da el resultado a la primera. Hacemos la suma de amount y contamos la tabla de company para saber cuantos pedidos se han realizado y aplicamos el IF para poder tener una respuesta true/false, true: "más de cuatro pedidos", false: "menos de cuatro pedidos" de esta manera podemos ordenar según si cumplen con la condición de transacciones o no.

Esta vez solo conseguimos las ids de las compañías para poder identificarlas y su suma de ventas junto al conteo y saber si tienen mas o menos de cuatro pedidos.