

## Nivell 1 - Exercici 1

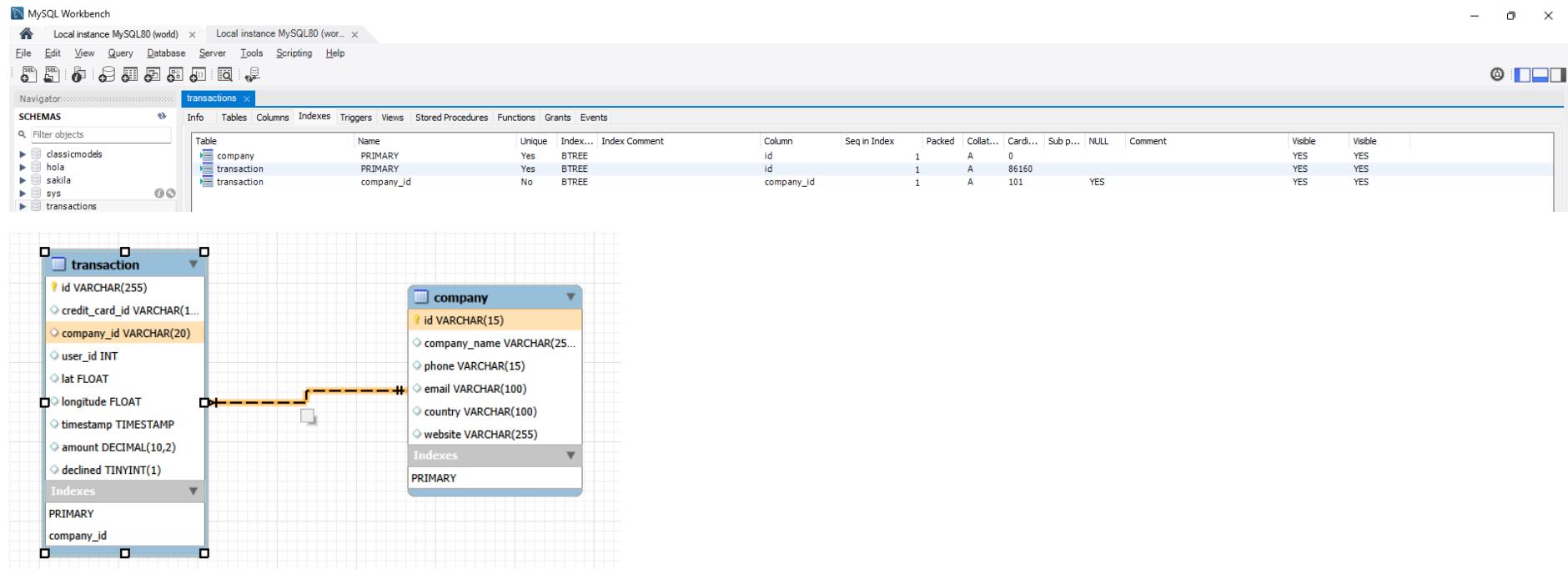
A partir dels documents adjunts (estructura\_dades i dades\_introduir), importa les dues taules. Mostra les característiques principals de l'esquema creat i explica les diferents taules i variables que existeixen. Assegura't d'incloure un diagrama que il·lustri la relació entre les diferents taules i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

The screenshot shows the MySQL Workbench interface with the 'transactions' schema selected in the Navigator pane. The 'transaction' table is currently selected in the results grid. The 'Info' tab is active, displaying detailed information about the table's structure and metadata.

Name	Engine	Version	Row Format	Rows	Avg Row Length	Data Length	Max Data Length	Index Length	Data Free	Auto Incr...	Create Time	Update Time	Check Time	Collation	Checksum	Co
company	InnoDB	10	Dynamic	100	163	16.0 KB	0.0 bytes	0.0 bytes	0.0 bytes	0	2025-11-03 13:23:34	2025-11-03 13:24:24		utf8mb4_0900_...		
transaction	InnoDB	10	Dynamic	94740	161	14.6 MB	0.0 bytes	8.5 MB	6.0 MB	0	2025-11-03 13:23:34	2025-11-03 13:37:20		utf8mb4_0900_...		

The screenshot shows the MySQL Workbench interface with the 'transaction' table selected in the Navigator pane. The 'Columns' tab is active in the results grid, displaying the detailed structure of the table's columns.

Table	Column	Type	Default Value	Nullable	Character Set	Collation	Privileges	Extra	Comments
company	<input type="checkbox"/> id	varchar(15)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references		
company	<input type="checkbox"/> company_name	varchar(255)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references		
company	<input type="checkbox"/> phone	varchar(15)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references		
company	<input type="checkbox"/> email	varchar(100)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references		
company	<input type="checkbox"/> country	varchar(100)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references		
company	<input type="checkbox"/> website	varchar(255)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references		
transaction	<input type="checkbox"/> id	varchar(255)		NO	utf8mb4	utf8mb4_0900_...	select,insert,update,references		
transaction	<input type="checkbox"/> credit_card_id	varchar(15)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references		
transaction	<input type="checkbox"/> company_id	varchar(20)		YES	utf8mb4	utf8mb4_0900_...	select,insert,update,references		
transaction	<input type="checkbox"/> user_id	int		YES			select,insert,update,references		
transaction	<input type="checkbox"/> lat	float		YES			select,insert,update,references		
transaction	<input type="checkbox"/> longitude	float		YES			select,insert,update,references		
transaction	<input type="checkbox"/> timestamp	timestamp		YES			select,insert,update,references		
transaction	<input type="checkbox"/> amount	decimal(10,2)		YES			select,insert,update,references		
transaction	<input type="checkbox"/> declined	tinyint(1)		YES			select,insert,update,references		



Hi ha dos taules, una es diu "company" i l'altra "transaction". Estan vinculades per les columnes "company\_id" (INDEX) de la taula "transaction" i la columna "id" (PRIMARY KEY) de la taula "company" a dins de una relació cardinal d'un a diversos (1:N) on les empreses poden aparèixer diverses vegades al table de transicions però sempre amb el mateix id.

La primera te 6 columnes, inclos "id" que es la clau primaria, totes de tipus VARCHAR amb diferent llarg maxim autorizat (des de 15 fins a 255 caracters), i 100 registres.

La segona te 9 columnes i 94740 registres. Les tres primeres, inclos "id" que es la clau primaria i "company\_id" que , son de tipus VARCHAR amb diferent llarg maxim autorizat (255, 15 i 20 de llarg autoritzat, respectivament per les columnes "id", "credit\_card\_id" i "company\_id").

VARCHAR es un tipus de dades que permet emmagatzemar "strings" de caracters de llarg variable.

La segona taula també te 5 tipus diferents de dades a les altres columnes:

- "user\_id" es un dada de tipus "INTEGER" es a dir que permet emmagatzemar nombres sencers.
- "lat" i "longitude" es un dada de tipus "FLOAT" es a dir que permet emmagatzemar nombre decimals, rondejades per l'ordinador.

- “timestamp” es un dada de tipus “TIMESPAMP” es a dir que permet emmagatzemar especific hora amb el format “YYYY-MM-DD HH:MM:SS” on “DD” correspon al dia
- “amount” es un dada de tipus “DECIMAL” es a dir que permet emmagatzemar precisos nombre decimals. La precisió d'aquest dade numeric s'ha d'especificar precisant entre parentesi com el format (X,Y) on X i Y son nombres sencers, X representant el nombre total de digits d'el valor i Y el nombre de digits després de la coma.
- “declined” es un dada de tipus “TINYINT”. Usualment permet emmagatzemar un nombre enter reduït autoritzant fins a 256 registres. En aquest cas, se li aplica un paràmetre (1) que el converteix en un boleà es a dir amb valor 1/TRUE i valor 0/FALSE per defecte.

## Nivell 1 - Exercici 2

Utilitzant JOIN realitzaràs les següents consultes:

```
5 -- Llistat dels països que estan generant vendes
6
7 • USE transactions;
8
9 • SELECT DISTINCT c.country AS paisos, ROUND(SUM(t.amount),2) AS total_vendes
10    FROM company AS c
11    JOIN transaction AS t
12      ON c.id = t.company_id
13    WHERE declined = 0
14    GROUP BY c.country
15    ORDER BY total_vendes DESC;
```

The screenshot shows a database query interface with the following details:

- Result Grid:** A table displaying the results of the query. The columns are "paisos" and "total\_vendes". The data is as follows:

paisos	total_vendes
Sweden	4242813.18
Netherlands	3883573.29
United Kingdom	3530322.20
Italy	3521572.91
Germany	3460941.29
France	1220257.44
United States	1060586.48
Belgium	917313.83
Norway	780275.91
Ireland	690290.58
New Zealand	681929.92
Australia	675522.04
Canada	541083.18
Spain	393278.43
China	230623.74

- Output:** A log of the query execution. It shows one row returned in 0.484 seconds.

#	Time	Action	Message	Duration / Fetch
1	11:37:23	SELECT DISTINCT c.country AS paisos, ROUND(SUM(t.amount),2) AS total_vendes FROM company AS c JOIN transaction AS t ON c.id = t.com...	15 row(s) returned	0.484 sec / 0.000 sec

```
18 -- Des de quants països es generen les vendes
19
20 • SELECT COUNT(DISTINCT c.country) AS compte_paisos_generant_vendes
21 FROM company AS c
22 JOIN transaction AS t
23 ON c.id = t.company_id
24 WHERE declined = 0;
25
26
```

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

compte_paisos_generant_vendes
15

Result 5 x Read Only

Action Output

#	Time	Action	Message	Duration / Fetch
1	11:38:22	SELECT COUNT(DISTINCT c.country) AS compte_paisos_generant_vendes FROM company AS c JOIN transaction AS t ON c.id = t.company_id ...	1 row(s) returned	0.375 sec / 0.000 sec

Form Editor  
Field Types  
Query Stats  
Execution Plan

```

27 -- Identifica la companyia amb la mitjana més gran de vendes --
28
29 • SELECT c.company_name AS companya, ROUND(AVG(t.amount),2) AS media_vendes
30 FROM company AS c
31 JOIN transaction AS t
32 ON c.id = t.company_id
33 WHERE declined = 0
34 GROUP BY companya
35 ORDER BY media_vendes DESC
36 LIMIT 1;

```

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

companya	media_vendes
Ac Fermentum Incorporated	284.91

Result 9 x

Action Output

#	Time	Action	Message	Duration / Fetch
1	11:39:53	SELECT c.company_name AS companya, ROUND(AVG(t.amount),2) AS media_vendes FROM company AS c JOIN transaction AS t ON c.id = t.co... 1 row(s) returned		0.468 sec / 0.000 sec

Read Only

Utilitzant només subconsultes (sense utilitzar JOIN):

```
44    -- Mostra totes les transaccions realitzades per empreses d'Alemanya
45
46 •  SELECT t.id AS id_transaccio, t.credit_card_id AS id_targeta_credit, t.company_id AS id_companya, t.user_id AS id_usuari, t.lat AS latitud, t.longitude AS ...
47   FROM transaction AS t
48   WHERE EXISTS (
49     SELECT c.id
50     FROM company AS c
51     WHERE t.company_id = c.id
52     AND c.country = "Germany");
53
```

The screenshot shows a database management interface with a results grid and a history panel.

**Result Grid:**

id_transaccio	id_targeta_credit	id_companya	id_usuari	latitud	longitud	temps_transaccio	suma	deinat
00138D3B-206D-4C03-94B7-63A2676EB984	CcS-4899	b-2222	318	41.3781	12.447	2020-03-25 10:43:43	426.36	0
0013C1B6-3B84-4D6C-8154-E2B3FBCA8E9	CcS-5070	b-2222	489	41.3814	2.18176	2020-12-17 18:15:37	316.90	0
00201A11-2E62-44C4-941D-198FC8D877F0	CcU-3512	b-2222	193	55.5704	-3.65129	2021-01-22 23:44:27	453.04	0
00235618-0A5C-4D49-9DCB-B3A9405D8923	CcS-8137	b-2222	3556	59.8421	18.729	2020-09-09 15:43:19	263.14	0
005A5A7B-1F1A-466C-9815-1625A78C9C38	CcS-8998	b-2222	4417	41.1591	-8.63905	2024-05-15 09:10:11	442.01	0
00687139-4B82-4FFA-8E73-B20376F04AB4	CcS-4870	b-2222	289	51.1966	10.4669	2019-03-09 19:37:49	524.84	0
0074F4DD-32F1-4827-8758-55896314623A	CcS-8081	b-2222	3500	39.7016	-8.50325	2016-12-26 23:06:57	491.90	0
00AA89CD-39D6-4DCB-8A1D-13BE73DC90A9	CcS-6797	b-2222	2216	55.7652	-3.76245	2021-04-25 03:06:59	167.15	0
00BE0904-6920-47D8-AE83-325E2269829D	CcS-4983	b-2222	402	38.708	-9.12993	2019-02-27 15:25:16	141.66	0
00DA0383-E048-4577-8ED1-3C56C258FF2F	CcS-9223	b-2222	4642	51.1742	10.2027	2019-03-21 11:47:34	325.62	0
00DD11DE-ED01-4BBD-93A0-174D183A59DF	CcS-7681	b-2222	3100	45.7565	4.83109	2024-01-28 18:20:49	242.53	0
01449CE0-98E9-4E5-9810-728C6BA00E6F	CcS-5424	b-2222	843	47.0163	2.26064	2024-02-17 19:37:14	451.71	0
0175E8C7-241E-42DA-A8B9-9F246CBF4D2F	CcS-7510	b-2222	2929	52.0619	4.29464	2021-08-28 16:29:38	9.46	0
01ABD488-06E2-4CA0-A131-AE66FF11B749	CcS-5053	b-2222	472	51.7738	5.17479	2020-01-28 01:15:07	368.41	0
01F1C7ED-0823-442D-AE0E-3134D5004866	CcS-6776	b-2222	2195	59.6697	18.6697	2022-12-17 09:40:14	168.79	0
01FABC61-18C8-441B-987C-459AA3F06097	CcS-5531	b-2222	950	55.3405	-3.3863	2020-04-30 08:57:27	333.45	0
023B714C-DCC1-4B03-AD8E-29B3673F631B	CcS-5103	b-2222	522	55.3362	-2.99198	2018-04-14 18:52:13	155.29	0
023B714C-DCC1-4B03-AD8E-29B3673F631B	CcS-5103	b-2222	522	55.3362	-2.99198	2018-04-14 18:52:13	155.29	0

**Action Output:**

#	Time	Action	Message	Duration / Fetch
1	11:47:01	SELECT tid AS id_transaccio, t.credit_card_id AS id_targeta_credit, t.company_id AS id_companya, t.user_id AS id_usuari, t.lat AS latitud, t.longitude AS ...	13291 row(s) returned	0.000 sec / 0.094 sec

No excloc les declinades perquè l'exercici demana totes les transaccions.

```

55 -- Llista les empreses que han realitzat transaccions per un amount superior a la mitjana de totes les transaccions
56
57 • SELECT c.id, c.company_name AS companya
58   FROM company AS c
59   WHERE EXISTS (
60     SELECT t.amount
61       FROM transaction AS t
62      WHERE c.id = t.company_id
63      AND declined = 0
64      AND t.amount > (
65        SELECT AVG(t.amount)
66          FROM transaction AS t
67      )
68 );

```

Result Grid | Filter Rows: \_\_\_\_\_ | Edit: | Export/Import: | Wrap Cell Content: |

	id	companya
▶	b-2222	Ac Fermentum Incorporated
	b-2226	Magna A Neque Industries
	b-2230	Fusce Corp.
	b-2234	Convallis In Incorporated
	b-2238	Ante Iaculis Nec Foundation
	b-2242	Donec Ltd
	b-2246	Sed Nunc Ltd
	b-2250	Amet Nulla Donec Corporation
	b-2254	Nascentur Ridiculus Mus Inc.
	b-2258	Vestibulum Lorem PC
	b-2262	Gravida Sagittis LLP

company 13 x

Output

Action Output	#	Time	Action	Message	Duration / Fetch
✓ 1 11:50:13	SELECT c.id, c.company_name AS companya FROM company AS c WHERE EXISTS ( SELECT t.amount FROM transaction AS t WHERE c.id = t...	100 row(s) returned	0.110 sec / 0.000 sec		

Result Grid  
Form Editor  
Field Types

```

71 -- Eliminaran del sistema les empreses que no tenen transaccions registrades, entrega el llistat d'aquestes empreses
72
73 • SELECT c.id, c.company_name AS companya
74   FROM company AS c
75   WHERE NOT EXISTS (
76     SELECT t.company_id
77       FROM transaction AS t
78      WHERE c.id = t.company_id);
79
80
81
82
83

```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content: | Result Grid

	id	companya
*	NULL	NULL

company 15 x Apply

**Output**

Action Output

#	Time	Action	Message	Duration / Fetch
1	11:51:02	SELECT c.id, c.company_name AS companya FROM company AS c WHERE NOT EXISTS ( SELECT t.company_id FROM transaction AS t WHE...	0 row(s) returned	0.015 sec / 0.000 sec

No hi ha empreses que no tinguin transaccions registrades. Per tant, no hi ha empreses per eliminar.

## Nivell 2 - Exercici 1

```
84 -- Identifica els cinc dies que es va generar la quantitat més gran d'ingressos a l'empresa per vendes.  
85 -- Mostra la data de cada transacció juntament amb el total de les vendes:  
86  
87 • SELECT DATE_FORMAT(t.timestamp, '%d-%m-%Y') AS data, ROUND(SUM(t.amount),2) AS suma_total_data  
88 FROM transaction AS t  
89 WHERE declined = 0  
90 GROUP BY data  
91 ORDER BY suma_total_data DESC  
92 LIMIT 5;  
93
```



data	suma_total_data
13-12-2022	14337.44
18-11-2019	13591.32
20-02-2023	13332.59
20-12-2017	13318.43
18-03-2019	12680.95

Output

#	Time	Action	Message	Duration / Fetch
1	11:55:59	SELECT DATE_FORMAT(t.timestamp, "%d-%m-%Y") AS data, ROUND(SUM(t.amount),2) AS suma_total_data FROM transaction AS t WHERE decli...	5 row(s) returned	0.266 sec / 0.000 sec

## Nivell 2 - Exercici 2

```
97 -- Quina és la mitjana de vendes per país? Presenta els resultats ordenats de major a menor mitjà:  
98  
99 • SELECT c.country AS pais, ROUND(AVG(t.amount),2) AS media_vendes  
100 FROM transaction AS t  
101 JOIN company AS c  
102 ON t.company_id = c.id  
103 WHERE t.declined = 0  
104 GROUP BY pais  
105 ORDER BY media_vendes DESC;  
--
```

The screenshot shows a database query results interface. At the top, there is a code editor with the SQL query. Below it is a results grid table with two columns: 'pais' and 'media\_vendes'. The grid contains 15 rows of data. To the right of the grid is a sidebar with icons for different features: Result Grid, Form Editor, Field Types, and Query Stats. Below the grid is an 'Output' section with a table showing the query log. The log table has columns for '#', 'Time', 'Action', 'Message', and 'Duration / Fetch'. One entry is visible: '# 1 11:56:58 SELECT c.country AS pais, ROUND(AVG(t.amount),2) AS media\_vendes FROM transaction AS t JOIN company AS c ON t.company\_id = c.id WHERE t.declined = 0 GROUP BY pais ORDER BY media\_vendes DESC; 15 row(s) returned Duration / Fetch 0.484 sec / 0.000 sec'. There is also a 'Read Only' status indicator.

pais	media_vendes
Australia	265.54
United States	264.42
Belgium	260.97
Germany	260.83
Ireland	260.39
Spain	260.28
France	259.91
New Zealand	259.59
Norway	259.14
Netherlands	258.34
Italy	258.12
Canada	257.41
Sweden	257.39
United Kingdom	256.68
China	252.60

Result 20 x

Output

#	Time	Action	Message	Duration / Fetch
1	11:56:58	SELECT c.country AS pais, ROUND(AVG(t.amount),2) AS media_vendes FROM transaction AS t JOIN company AS c ON t.company_id = c.id WHERE t.declined = 0 GROUP BY pais ORDER BY media_vendes DESC;	15 row(s) returned	0.484 sec / 0.000 sec

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

Result Grid

Form Editor

Field Types

Query Stats

## Nivell 2 - 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.

```

112    -- Mostra el llistat aplicant JOIN i subconsultes.
113
114 • SELECT t.company_id AS id_companya, c.company_name AS companya, c.country AS pais, t.id AS id_transaccio, t.credit_card_id AS id_targeta_credit, t.user_id AS id_usuari, t.lat AS latitud, t.longitude AS longitud, t.timestamp
115   FROM transaction AS t
116   JOIN company AS c
117  ON t.company_id = c.id
118 WHERE t.declined = 0
119 AND c.company_name <> "Non Institute"
120 AND c.country = (
121   SELECT DISTINCT c.country
122   FROM company AS c
123  WHERE c.company_name = "Non Institute")
124 ORDER BY company_name ASC;
125
126

```

Result Grid | Filter Rows: | Exports: | Wrap Cell Content: | Fetch rows:

	id_companya	companya	pais	id_transaccio	id_targeta_credit	id_usuari	latitud	longitud	temps_transaccio	suma	dezinat
▶	b-2354	Ac Libero Inc.	United Kingdom	00703B9-949A-4752-AE94-654E045EF083	Ccs-7206	2625	45.7559	4.84268	2022-01-03 11:45:49	351.82	0
▶	b-2354	Ac Libero Inc.	United Kingdom	009CF260-0B9C-4259-AF56-FD3AC7F212C4	Ccs-9336	4755	41.3805	2.17768	2018-11-20 02:57:18	143.31	0
▶	b-2354	Ac Libero Inc.	United Kingdom	0086A710-2990-4B83-83D-4423EF56459F	Cdu-3708	165	55.6334	-3.89331	2020-07-21 00:17:27	219.00	0
▶	b-2354	Ac Libero Inc.	United Kingdom	00C00694-B86B-454C-A10D-C01A838A2743	Ccs-6250	1669	38.7215	-9.13005	2017-04-01 05:31:02	632.39	0
▶	b-2354	Ac Libero Inc.	United Kingdom	00DAAE41-ED2C-4A29-943D-5E6FCFB21DD2	Ccs-9565	4984	51.2642	10.2354	2023-01-04 10:00:22	318.85	0
▶	b-2354	Ac Libero Inc.	United Kingdom	00F94C0B-AC1A-4BC6-AC21-486475CE838A	Ccs-8494	3913	55.2526	-3.74793	2024-12-31 08:03:47	248.19	0
▶	b-2354	Ac Libero Inc.	United Kingdom	010AE00D-ADBC-4D77-871E-5213A97CDD59	Ccs-8303	3722	55.0521	-3.82977	2024-05-29 21:36:06	141.01	0
▶	b-2354	Ac Libero Inc.	United Kingdom	01673B8B-E20C-4909-838B-796C5670EEFF	Ccs-5959	1378	51.9282	5.73548	2015-07-13 17:01:30	115.19	0
▶	b-2354	Ac Libero Inc.	United Kingdom	018FB770-730B-472D-A72A-E2FAF62CDB7	Ccs-7639	3058	52.1163	5.21252	2020-03-22 03:20:28	364.48	0
▶	b-2354	Ac Libero Inc.	United Kingdom	01B1C87-9362-4C05-B2EE-85D-446731F08	Ccs-6214	1633	40.5141	-4.0726	2023-03-23 09:13:51	268.12	0
▶	b-2354	Ac Libero Inc.	United Kingdom	01DA1C06-888E-491B-A868-96540ABC04F8	Ccs-8509	3928	60.4298	18.775	2014-10-14 22:32:50	417.27	0
▶	b-2354	Ac Libero Inc.	United Kingdom	01FE846-3AEA-446C-A4EE-E9A5C93B7818	Ccs-5593	1012	52.3347	5.37303	2016-11-04 17:37:35	193.97	0
▶	b-2354	Ac Libero Inc.	United Kingdom	0202675A-FC2C-4B6E-8D04-D58A0CDD485A	Ccs-9253	4672	59.3388	18.0609	2016-02-10 00:28:50	508.31	0
▶	b-2354	Ac Libero Inc.	United Kingdom	0203BF66-61AB-440E-952D-CF8361397129	Ccs-6794	2213	51.4395	5.47265	2021-11-25 08:47:34	326.63	0
▶	b-2354	Ac Libero Inc.	United Kingdom	027916FA-AE82-4BD1-9387-D5FEE85E9A2E	Ccs-9444	4863	40.426	-3.71115	2023-10-30 08:35:19	148.91	0
▶	b-2354	Ac Libero Inc.	United Kingdom	027B2596-0241-4DE7-910F-EF1497367550	Ccs-7667	3086	41.7916	12.3845	2020-04-05 00:43:34	65.07	0

Result 22 ×

Output

#	Time	Action	Message	Duration / Fetch
1	12:01:56	SELECT t.company_id AS id_companya, c.company_name AS companya, c.country AS pais, t.id AS id_transaccio, t.credit_card_id AS id_targeta...	12213 row(s) returned	0.000 sec / 0.078 sec

```

127    -- Mostra el llistat aplicant solament subconsultes.
128
129 •  SELECT t.company_id AS id_companya, t.id AS id_transaccio, t.credit_card_id AS id_targeta_credit, t.user_id AS id_usuari, t.lat AS latitud, t.longitude AS longitud, t.timestamp AS temps_transaccio, t.amount AS suma, t.declined AS declinat
130   FROM transaction AS t
131   WHERE t.declined = 0
132   AND EXISTS (
133     SELECT c.id
134     FROM company AS c
135     WHERE t.company_id = c.id
136     AND c.company_name <> "Non Institute"
137     AND c.country =
138       SELECT DISTINCT c.country
139       FROM company AS c
140       WHERE c.company_name = "Non Institute"
141   )
142 );
...

```

Result Grid									
	id_companya	id_transaccio	id_targeta_credit	id_usuari	latitud	longitud	temps_transaccio	suma	declinat
▶	b-2246	008629B4-C9A9-406C-A3D2-71FDA47BC546	CcS-7063	2482	45.7666	4.83048	2015-07-30 12:12:42	486.44	0
	b-2246	00872BA4-54A3-4B8E-B13F-2D57535AA17A	CcS-8475	3894	55.6212	-3.7546	2017-10-26 22:08:26	414.06	0
	b-2246	01F075B1-D7AE-4D02-AAD9-5FFD72A4F3C	CcS-8700	4119	55.856	-3.15783	2018-01-27 13:44:36	103.73	0
	b-2246	023FCE8-E618-4938-8F56-C8DF80540ADD	CcS-7816	3235	46.3568	1.82755	2016-12-19 11:53:45	219.28	0
	b-2246	02683BE8-EF91-4564-957B-D6F1662AB7C5	CcS-9471	4890	42.1332	12.396	2017-01-10 21:09:29	326.87	0
	b-2246	02C2F29E-CEF2-4C1E-A594-F476E8F279C0	CcS-9082	4501	39.4662	-0.373246	2020-05-24 01:17:29	155.72	0
	b-2246	02F468DC-426C-47C2-8B0A-D8B25B7A81AF	CcS-6913	2332	52.175	19.3508	2023-03-17 16:36:27	305.35	0
	b-2246	03068E3B-817B-4A49-934E-0E439291A104	CcS-5302	721	51.9233	18.926	2021-12-02 23:06:02	339.58	0
	b-2246	0347BFE6-8EB5-4387-B187-0E78E8F2B8FB	CcS-7674	3093	45.768	4.84271	2021-12-30 08:40:24	172.93	0
	b-2246	03AEBD0E-DC97-4B03-9C57-6A6DB78026FD	CcS-6121	1540	50.8113	10.3145	2018-11-11 11:28:49	114.77	0
	b-2246	03CA36D3-88FF-4DBF-BFD4-4CC7DA4EED2B	CcS-8036	3455	52.5178	13.4131	2017-02-25 15:38:21	440.27	0
	b-2246	04494182-96DD-42EB-82FE-5F92C5210537	CcS-6791	2210	41.9542	12.4607	2018-05-17 17:53:53	241.59	0
	b-2246	045AACF6-FF85-49FB-90E4-E6730655366A	CcS-5363	782	39.2464	-7.90454	2018-08-09 22:12:54	188.58	0
	b-2246	0489FDAC-86A4-4929-954E-9A2272189CAC	CcS-7296	2715	51.1647	10.7348	2021-03-30 04:29:22	205.45	0
	b-2246	0490C36A-1B02-4CED-B33B-80B3AC86C6C8	CcS-7539	2958	46.4281	1.64603	2023-05-20 19:28:00	424.64	0
	b-2246	04A0ABDE-FB25-4E59-A901-B4BB79380A33	CcS-4871	290	52.0589	5.55327	2022-11-04 05:35:28	461.34	0

transaction 27 x



Result Grid



Form Editor



Field Types



Query Stats



Read Only

Output

Action Output	#	Time	Action	Message	Duration / Fetch
✓ 1 12:13:36 SELECT t.company_id AS id_companya, t.id AS id_transaccio, t.credit_card_id AS id_targeta_credit, t.user_id AS id_usuari, t.lat AS latitud, t.longitu...				12213 row(s) returned	0.000 sec / 0.078 sec

### Nivell 3 - Exercici 1

Presenta el nom, telèfon, país, data i amount, d'aquelles empreses que van realitzar transaccions amb un valor comprès entre 350 i 400 euros i en alguna d'aquestes dates: 29 d'abril del 2015, 20 de juliol del 2018 i 13 de març del 2024. Ordена els resultats de major a menor quantitat.

```
151 •  SELECT c.company_name AS companya, c.phone AS telefon, c.country AS pais, DATE_FORMAT(t.timestamp, '%d-%m-%Y') AS data_transaccio, t.amount AS suma_transaccio
152   FROM transaction AS t
153   JOIN company AS c
154   ON t.company_id = c.id
155   WHERE t.amount BETWEEN 350 AND 400
156   AND t.declined = 0
157   AND t.timestamp IN (
158     SELECT t.timestamp
159     FROM transaction AS t
160     WHERE DATE(t.timestamp) IN ("2015-04-29", "2018-07-20", "2024-03-13")
161   )
162   ORDER BY suma_transaccio DESC;
```

The screenshot shows the MySQL Workbench interface with the following components:

- Code Area:** Displays the SQL query from line 151 to 162.
- Result Grid:** A table showing the results of the query. The columns are: companya, telefon, pais, data\_transaccio, and suma\_transaccio. The data includes:

companya	telefon	pais	data_transaccio	suma_transaccio
Aliquam PC	01 45 73 52 16	Germany	13-03-2024	399.84
Auctor Mauris Vel LLP	08 09 28 74 14	United States	20-07-2018	399.51
At Pede Corp.	06 14 48 33 15	Italy	29-04-2015	390.69
Aliquam PC	01 45 73 52 16	Germany	13-03-2024	388.29
Orci Adipiscing Limited	03 18 00 77 81	United Kingdom	20-07-2018	373.71
Fringilla LLC	08 29 15 93 57	New Zealand	29-04-2015	367.62
Pede Cum Ltd	07 62 26 48 38	Norway	20-07-2018	356.87
Auctor Mauris Vel LLP	08 09 28 74 14	United States	13-03-2024	353.75

- Output Tab:** Shows the query log with one entry: "1 12:19:09 SELECT c.company\_name AS companya, c.phone AS telefon, c.country AS pais, DATE\_FORMAT(t.timestamp, '%d-%m-%Y') AS data\_transaccio, t.... 8 row(s) returned".
- Right Panel:** Contains icons for Result Grid, Form Editor, Field Types, and Query Stats.
- Status Bar:** Shows "Read Only".

## Nivell 3 - Exercici 2

```
167 -- Necessitem optimitzar l'assignació dels recursos i depèndrà de la capacitat operativa que es requereixi,  
168 -- per la qual cosa et demanen la informació sobre la quantitat de transaccions que realitzen les empreses,  
169 -- però el departament de recursos humans és exigent i vol un llistat de les empreses on especifiquis si tenen més de 400 transaccions o menys.  
170  
171 • SELECT c.company_name, COUNT(t.id) AS total_transaccions, IF(COUNT(t.id)>400, "Si", "No") AS "Mes_de_400_transaccions"  
172 FROM company AS c  
173 JOIN transaction AS t ON c.id = t.company_id  
174 GROUP BY c.company_name  
175 ORDER BY total_transaccions DESC;
```

The screenshot shows a database query interface with the following details:

- Result Grid:** A table displaying the results of the query. The columns are `company_name`, `total_transaccions`, and `Mes_de_400_transaccions`. The data includes rows for various companies like Ac Fermentum Incorporated, Nunc Interdum Incorporated, Donec Fringilla PC, etc., with their respective transaction counts and whether they exceed 400.
- Action Output:** A log showing the execution of the query. It includes the timestamp (12:22:28), the query itself, the number of rows returned (100), and the duration (0.125 sec / 0.000 sec).
- Toolbar:** Includes buttons for Result Grid, Form Editor, Field Types, and Query Stats.
- Status Bar:** Shows "Result 34 x" and "Read Only".

Transaccions declinades no excloses ja que el camp de recerca no són les vendes. Final del resultat d'aquesta consulta a continuació:

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

company_name	total_transacciones	Mes_de_400_transacciones
Aliquam Iaculis Lacus Corp.	426	Si
Sed Est Corp.	426	Si
Metus Vitae Associates	425	Si
Nunc Sit Incorporated	424	Si
Neque Tellus Imperdiet Corp.	424	Si
Nascetur Ridiculus Mus Inc.	424	Si
Elt Etiam Laoreet Associates	418	Si
Mattis Foundation	418	Si
Euismod Mauris Institute	418	Si
Amet Luctus Vulpitate Foundation	411	Si
Magna A Neque Industries	410	Si
Risus Associates	407	Si
Dui Quis Institute	402	Si
Nec Luctus LLC	399	No
Fringilla LLC	397	No
Lorem Eu Incorporated	380	No

Result 34 ×

Output

Action Output

#	Time	Action	Message	Duration / Fetch
1	12:22:28	SELECT c.company_name, COUNT(t.id) AS total_transacciones, IF(COUNT(t.id)>400, "Si", "No") AS "Mes_de_400_transacciones" FROM company ...	100 row(s) returned	0.125 sec / 0.000 sec