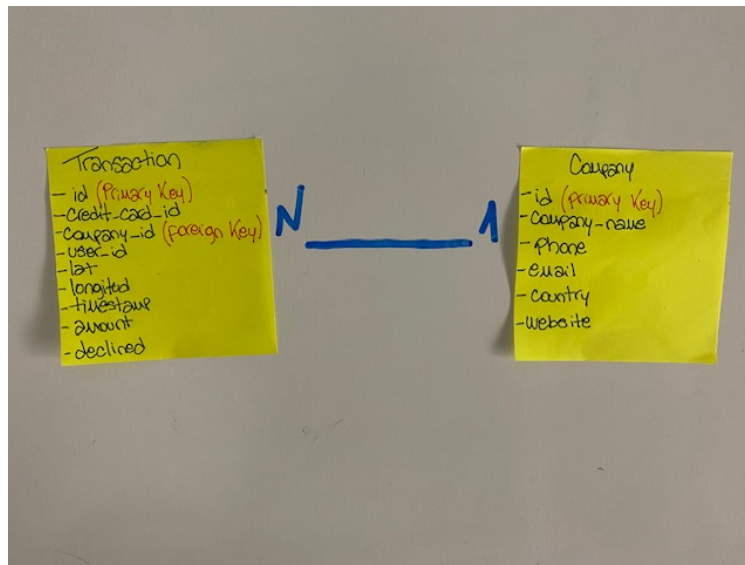


En este esquema podemos observar la tabla de hechos “Transacción” que tiene como Primary Key la columna ID, también tiene como Foreign Key la columna Company_id la cual sirve para conectar la tabla de dimensión “Company”. La relación es de muchos a uno, debido a que muchas transacciones pueden ser solamente de una compañía y cada compañía puede efectuar más de una transacción.



```
1 # Llistat dels països que estan fent compres.
2
3 • SELECT DISTINCT country
4 FROM company;
```

0%	14:4	Result Grid	Filter Rows:	Search	Export:
country					
Germany					
Australia					
United States					
New Zealand					
Norway					
United Kingdom					
Italy					
Belgium					
Sweden					
Ireland					
China					
Canada					
France					
Netherlands					
Spain					

```

1  # Des de quants països es realitzen les compres.
2
3  SELECT COUNT(DISTINCT country) as Cdt_Paises
4  FROM company;

```

0%	14:4	Result Grid	Filter Rows: Search	Export:
Cdt_Paises				
15				

```

1  # Identifica la companyia amb la mitjana més gran de vendes.
2
3  SELECT company_name
4  FROM company
5  JOIN (
6      SELECT AVG(amount), company_id
7      FROM transaction
8      GROUP BY company_id
9      ORDER BY 1 DESC
10     LIMIT 1) as subq
11  ON company.id = subq.company_id;

```

100%	33:11	Result Grid	Filter Rows: Search	Export:
company_name				
Eget Ipsum Ltd				

```

1  # Utilitzant només subconsultes (sense utilitzar JOIN):
2
3  # Mostra totes les transaccions realitzades per empreses d'Alemanya.
4
5  SELECT *
6  FROM transaction
7  WHERE company_id IN (
8      SELECT id
9      FROM company
10     WHERE country = "Germany");

```

00%

47:1

Result Grid

Filter Rows:

Search

Edit:

Export/Import:

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined	
108B1D1D-5B23-A76C-55EF-C568E49A05DD	CcU-2938	b-2222	275	83.7839	-178.86	2021-07-07 17:43:16	293.57	0	
EA2C3281-C9C1-A387-44F8-729FB4B51C76	CcU-2938	b-2222	275	20.2004	-116.84	2021-05-09 10:25:08	119.36	1	
0DD2E608-5C9E-D1B3-4999-B99F43AD735A	CcU-2959	b-2234	275	9.68811	130.282	2021-04-17 05:30:17	252.47	1	
AB069F53-965E-A2A8-CE06-CA8C4FD92501	CcU-2959	b-2234	275	1.64819	-158.007	2021-04-15 13:37:18	60.99	0	
0466A42E-47CF-8D24-FD01-C0B689713128	CcU-4219	b-2302	170	-43.9695	-117.525	2021-07-26 07:29:18	49.53	0	
0A476ED9-0C13-1962-F87B-D3563924B539	CcU-4359	b-2302	221	-56.4901	114.801	2022-02-26 20:33:54	430.49	0	
122DC333-E19F-D629-DCD8-9C54CF1EBB9A	CcU-4366	b-2302	221	29.6372	-166.173	2021-06-09 06:04:14	172.01	0	
135267BA-2E7D-957C-C42C-6450A2B3ED54	CcU-4520	b-2302	210	20.6724	14.9732	2021-12-29 20:38:23	17.97	0	
14CAE5B5-8FB1-3E4A-4C85-0EA4167534F4	CcU-4849	b-2302	189	-53.6202	93.0533	2021-12-31 00:29:42	388.04	0	
158A3ACB-541C-DBCC-65BD-6373C67BF1C	CcU-4849	b-2302	183	42.5424	-170.347	2022-03-08 05:02:19	240.29	0	
162C7E78-2B6B-7971-A1E4-D2124E732451	CcU-4527	b-2302	210	-69.1381	58.0017	2021-04-11 05:59:18	231.26	0	
1717FD6B-ADAD-7082-A748-9112BE892CCC	CcU-4219	b-2302	172	69.4892	-138.411	2021-12-29 16:18:54	249.91	0	
1753A288-9FC1-52E6-5C39-A1FFB97B0D3A	CcU-4345	b-2302	222	57.9422	-114.729	2021-08-17 05:32:08	497.84	0	
186F53DE-DE27-B1FE-B82F-15B61CEB7726	CcU-4310	b-2302	225	-72.7448	36.6211	2021-12-20 13:13:45	238.16	0	
18C4E2DD-1E4C-F35E-2198-C660BD81DC25	CcU-4849	b-2302	177	68.0133	91.4839	2021-09-24 18:55:25	237.04	0	
18CDBA7C-ABC1-813D-FAF3-4BA97429368	CcU-4219	b-2302	173	51.3881	-156.371	2021-06-21 03:21:34	58.16	0	
19E1EC3E-2119-1EFD-8AAE-5930D4A4E63F	CcU-4219	b-2302	154	-56.0839	116.987	2021-07-06 21:40:15	29.63	0	
1B117D49-936C-BA6C-E94B-30C3293A239	CcU-4219	b-2302	163	-75.099	109.034	2021-05-09 23:56:04	371.35	0	
1B521826-5860-5A86-5364-6EB6A5CC21B7	CcU-4226	b-2302	231	-53.4613	49.1484	2021-08-14 02:39:50	476.33	0	
1C3B3CC4-B919-7616-6A57-EEBDD7B7B68B	CcU-4415	b-2302	217	81.1737	62.8835	2021-09-27 16:07:34	462.35	0	
2075B12D-69AB-7022-57BB-33ED49B72766	CcU-4247	b-2302	229	-9.03682	88.9005	2022-02-13 04:07:29	87.44	0	
241827A6-E87C-6DA3-5AC9-BBFCF42B7D2A	CcU-4849	b-2302	190	-12.1172	-175.322	2021-08-04 04:44:35	487.64	0	
2585891B-C4C7-075E-358B-B575339E5177	CcU-4450	b-2302	215	32.9171	-40.6059	2021-08-24 05:32:36	253.49	0	
263035AA-8758-E413-8CC4-6D8F81BBF899	CcU-4338	b-2302	223	36.61	83.1953	2021-06-21 11:23:01	499.23	0	
2C9A4725-4B19-621C-4EE4-AE9E31CFE5B0	CcU-4219	b-2302	149	-46.7357	162.102	2021-08-14 09:23:34	28.95	0	

transaction 9

Time	Action	Response
22:31:41	SELECT * FROM transaction WHERE company_id IN (SELECT id FROM company WHERE country = "Germany")	118 row(s) returned

```

1  # Utilitzant només subconsultes (sense utilitzar JOIN):
2  # Llista les empreses que han realitzat transaccions per un amount superior a la mitjana de totes les transaccions.
3
4  • SELECT company_name
5    FROM company
6   WHERE id IN (
7       SELECT company_id
8       FROM transaction
9       WHERE declined = 0 AND amount > (
10          SELECT AVG(amount)
11          FROM transaction));

```

10% 57:1

Result Grid Filter Rows: Search Export:

company_name	
Lorem Eu Incorporated	
Non Institute	
Ut Semper Foundation	
Nunc Interdum Incorporated	
Ac Fermentum Incorporated	
Enim Condimentum Ltd	
Tortor Nunc Commodore Company	
Malesuada PC	
Arcu LLP	
Aliquet Diam Limited	
Mauris Institute	
Sed Nunc Ltd	
Fringilla LLC	
Neque Tellus Incorporated	
Non Magna LLC	
Sed LLC	
Quam A Felis Industries	
Rutrum Non Inc.	
Amet Luctus Vulputate Foundation	
Eget Ipsum Ltd	
Sapien Nunc Pulvinar LLP	
Amet Institute	
Ac Industries	
Viverra Donec Foundation	
company 10	

```

1  # Utilitzant només subconsultes (sense utilitzar JOIN):
2  # Eliminaran del sistema les empreses que no tenen transaccions registrades, entrega el llistat d'aquestes empreses.
3
4  • SELECT company_name
5    FROM company
6   WHERE id NOT IN (
7       SELECT company_id
8       FROM transaction);

```

00% 57:1

Result Grid Filter Rows: Search Export:

company_name	

```

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), sum(amount) AS Total_Ventas
6 FROM transaction
7 WHERE declined = 0
8 GROUP BY 1
9 ORDER BY 2 DESC
10 LIMIT 5;

```

100% 13:1

Result Grid Filter Rows: Search Export:

DATE(timestamp)	Total_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

```

1 # Exercici 2
2 # Quina és la mitjana de vendes per país? Presenta els resultats ordenats de major a menor mitjà.
3
4 • SELECT country, AVG(amount) as Mitja_Vendes
5 FROM company as c
6 JOIN transaction as t ON t.company_id = c.id
7 GROUP BY 1
8 ORDER BY 2 DESC;

```

100% 13:1

Result Grid Filter Rows: Search Export:

country	Mitja_Vendes
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

```

1 # Exercici 3
2 # En la teva empresa, es planteja un nou projecte per a llançar algunes campanyes publicitàries per a fer competència a la companyia "Non Institute".
3 # Per a això, et demanen la llista de totes les transaccions realitzades per empreses que estan situades en el mateix país que aquesta companyia.
4
5 # Mostra el llistat aplicant JOIN i subconsultes.
6
7 • SELECT *
8 FROM transaction
9 JOIN (
10     SELECT id
11     FROM company
12     WHERE country = (
13         SELECT country
14         FROM company
15         WHERE company_name = 'Non Institute')) as subq
16 ON transaction.company_id = subq.id;

```

100%

13:1

Result Grid

Filter Rows:

Search

Export:

id	credit_card_id	company_id	user_id	lat	longitude	timestamp	amount	declined	id
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
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
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
BC2B9A38-77B4-28CD-1FE8-14DE863E773	CcU-3092	b-2310	275	-78.0295	18.5295	2021-10-18 07:27:35	477.95	1	b-2310
1479B3D2-B7B4-C7BB-4CE3-8D7C2DE85ABB	CcU-2994	b-2326	133	66.2672	172.399	2021-08-09 00:58:07	309.45	0	b-2326
152598C2-029D-D684-4B66-91EDF393EBFF	CcU-2994	b-2326	126	-67.0189	-141.672	2021-07-05 03:10:00	395.43	0	b-2326
1B636B58-A2E8-7C69-D9C9-C54535DAFD3B	CcU-2994	b-2326	131	70.2543	-13.1336	2021-07-06 08:48:46	195.06	0	b-2326
20418DE5-B804-BE9B-BD7A-A95C1BFDBF5C	CcU-2994	b-2326	126	-79.1145	1.51481	2022-01-03 15:59:29	479.52	0	b-2326
239B8576-6C0E-137A-C2F6-3180A188A2D3	CcU-2994	b-2326	126	23.6174	137.222	2021-08-26 06:04:05	43.90	0	b-2326
267C4A86-7BA7-1C5E-0718-2824983C87DD	CcU-2994	b-2326	126	-17.5259	104.915	2021-10-01 21:08:53	122.63	0	b-2326
3142C93E-B3B7-49E4-EE2D-29CA834B198D	CcU-2994	b-2326	126	-67.8476	-119.978	2021-04-06 17:24:44	91.59	0	b-2326
3578688E-7B1D-B887-3BC7-20B8673AA31E	CcU-2994	b-2326	126	87.0665	-22.7339	2021-07-26 22:59:24	303.60	0	b-2326
360C7814-F7AF-B43A-0946-AB38D2683C86	CcU-2994	b-2326	116	-7.93005	-79.0733	2021-08-21 10:19:58	494.82	0	b-2326
391E1CFD-D653-E45B-A729-F2EB93247B58	CcU-2994	b-2326	118	60.5512	103.904	2021-10-09 00:50:38	271.27	0	b-2326
3C4D7C2A-A402-B941-625A-D64CA53526E8	CcU-2994	b-2326	117	23.1627	-10.381	2021-04-25 19:11:52	441.27	0	b-2326
3ED634C2-01CA-D6E9-2DBD-24B53A7912F7	CcU-4219	b-2326	137	69.0549	96.5033	2021-03-29 11:38:38	478.54	0	b-2326
3FEC4131-9BED-2EA6-1776-82674C80DDBB	CcU-2994	b-2326	126	-7.28469	179.063	2021-07-25 04:59:17	393.42	0	b-2326

Result 14

Result 14

```

1 # Exercici 3
2 # En la teva empresa, es planteja un nou projecte per a llançar algunes campanyes publicitàries per a fer competència a la companyia "Non Institute".
3 # Per a això, et demanen la llista de totes les transaccions realitzades per empreses que estan situades en el mateix país que aquesta companyia.
4
5 # Mostra el llistat aplicant solament subconsultes.
6
7 • SELECT *
8 FROM transaction
9 WHERE company_id IN (
10     SELECT id
11     FROM transactions.company
12     WHERE country = (
13         SELECT country
14         FROM transactions.company
15         WHERE company_name = 'Non Institute'));

```

100%

13:1

Result Grid

Filter Rows:

Search

Edit:

Export/Import:

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-1FE8-14DE863E773	CcU-3092	b-2310	275	-78.0295	18.5295	2021-10-18 07:27:35	477.95	1	
1479B3D2-B7B4-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	
20418DE5-B804-BE9B-BD7A-A95C1BFDBF5C	CcU-2994	b-2326	126	-79.1145	1.51481	2022-01-03 15:59:29	479.52	0	
239B8576-6C0E-137A-C2F6-3180A188A2D3	CcU-2994	b-2326	126	23.6174	137.222	2021-08-26 06:04:05	43.90	0	
267C4A86-7BA7-1C5E-0718-2824983C87DD	CcU-2994	b-2326	126	-17.5259	104.915	2021-10-01 21:08:53	122.63	0	
3142C93E-B3B7-49E4-EE2D-29CA834B198D	CcU-2994	b-2326	126	-67.8476	-119.978	2021-04-06 17:24:44	91.59	0	
3578688E-7B1D-B887-3BC7-20B8673AA31E	CcU-2994	b-2326	126	87.0665	-22.7339	2021-07-26 22:59:24	303.60	0	
360C7814-F7AF-B43A-0946-AB38D2683C86	CcU-2994	b-2326	116	-7.93005	-79.0733	2021-08-21 10:19:58	494.82	0	
391E1CFD-D653-E45B-A729-F2EB93247B58	CcU-2994	b-2326	118	60.5512	103.904	2021-10-09 00:50:38	271.27	0	
3C4D7C2A-A402-B941-625A-D64CA53526E8	CcU-2994	b-2326	117	23.1627	-10.381	2021-04-25 19:11:52	441.27	0	
3ED634C2-01CA-D6E9-2DBD-24B53A7912F7	CcU-4219	b-2326	137	69.0549	96.5033	2021-03-29 11:38:38	478.54	0	
3FEC4131-9BED-2EA6-1776-82674C80DDBB	CcU-2994	b-2326	126	-7.28469	179.063	2021-07-25 04:59:17	393.42	0	
41C13F08-471E-D475-3E14-760DF3F79B42	CcU-4219	b-2326	138	-51.7289	55.3294	2022-01-16 16:48:55	45.63	0	
41EC591D-808E-D85C-F05F-08BC3DE7A618	CcU-2994	b-2326	126	5.38535	-78.3917	2022-01-06 07:47:39	335.54	0	

1

----- NIVELL 3

2

3

4

Exercici 1

5

Presenta el nom, telèfon, país, data i amount, d'aquelles empreses que van realitzar transaccions amb un valor comprès entre 100 i 200 euros

6

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.

7

8

9

10

11

12

13

14

```

SELECT company_name, phone, country, subq.timestamp, subq.amount
FROM company
JOIN (
  SELECT company_id, amount, timestamp
  FROM transaction
  WHERE (amount between 100 and 200) AND (DATE(timestamp) = '2021-04-29' OR DATE(timestamp) = '2021-07-20' OR DATE(timestamp) = '2022-03-13')) AS subq
ON company.id = subq.company_id
ORDER BY subq.amount DESC;

```

100%

33:1

Result Grid

Filter Rows: Search

Export:

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

1

Exercici 2

2

Necessitem optimitzar l'assignació dels recursos i dependrà de la capacitat operativa que es requereixi,

3

per la qual cosa et demanen la informació sobre la quantitat de transaccions que realitzen les empreses,

4

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.

5

6

7

8

9

10

11

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18

```

SELECT company_name, subq.Mas_d4_Trans
FROM company
JOIN (
  SELECT company_id, COUNT(id),
  CASE
    WHEN COUNT(id) >= 4 THEN 'SI'
    ELSE 'NO'
  END AS Mas_d4_Trans
  FROM transaction
  WHERE declined = 0
  GROUP BY company_id) AS subq
ON company.id = subq.company_id;

```

30%

31:9

Result Grid

Filter Rows: Search

Export:

company_name	Mas_d4_Trans
Magna A Neque Industries	NO
Fusce Corp.	NO
Convallis In Incorporated	NO
Ante Iaculis Nec Foundation	NO
Donec Ltd	NO
Sed Nunc Ltd	NO
Amet Nulla Donec Corporation	NO
Nascetur Ridiculus Mus Inc.	NO
Vestibulum Lorem PC	NO
Gravida Sagittis LLP	NO
Mus Aenean Eget Foundation	NO
Dis Parturient Institute	NO
Sed LLC	NO
Arcu LLP	SI
Pretium Neque Corp.	NO
Fringilla LLC	NO
Quisque Libero LLC	NO
Auctor Mauris Vel LLP	NO

Result 5

Read Only