UD4
Activity 6

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ÍNDICE

Activity – SELECT Queries (DQL)

Objective

To practice the use of the SELECT statement and all its clauses (WHERE, ORDER BY, LIMIT), along with operators and patterns, to query real information within the blogdb database.
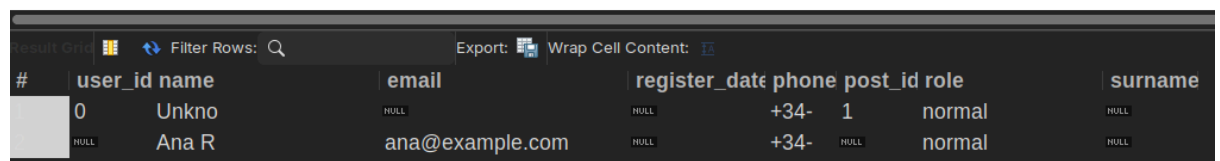
Instructions

Below each exercise:

· Write the SQL query used.

· Add a screenshot with the result obtained.

EXERCISES

1. Show all users in the user table
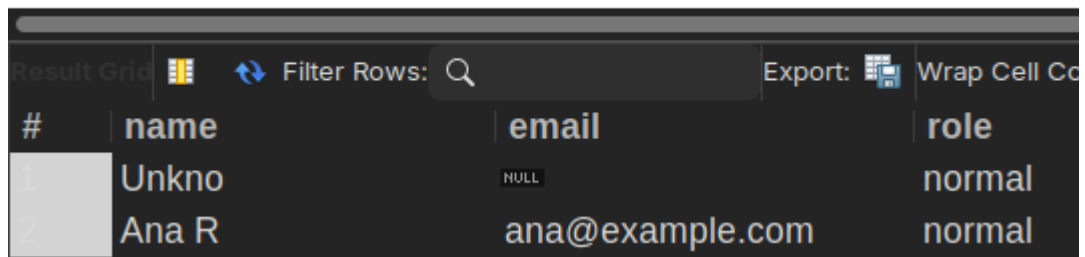
```
3 •  SELECT * FROM user;
```

#	user_id	name	email	register_date	phone	post_id	role	surname
	0	Unkno	NULL	NULL	+34-	1	normal	NULL
	NULL	Ana R	ana@example.com	NULL	+34-	NULL	normal	NULL

2. Show only the columns name, email, and role from the user table

```
6       -- 2
7 •     SELECT name, email, role FROM user;
```
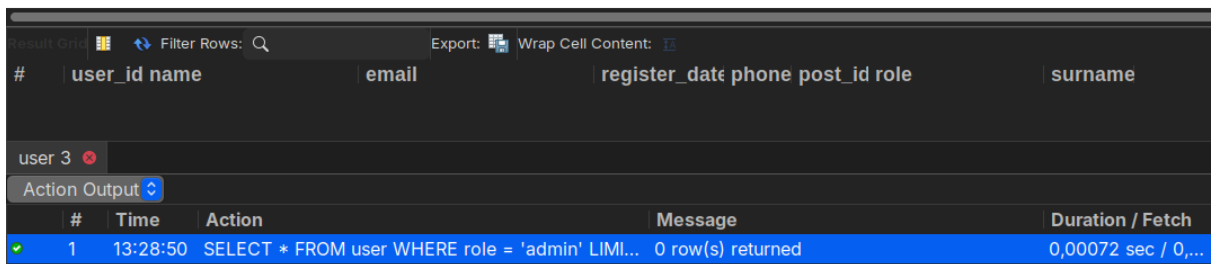
#	name	email	role
1	Unkno	NULL	normal
2	Ana R	ana@example.com	normal

3. Show users whose role is 'admin'

```
9       -- 3
10 •    SELECT * FROM user
11      WHERE role = 'admin';
```

#	user_id name	email	register_date phone post_id role	surname
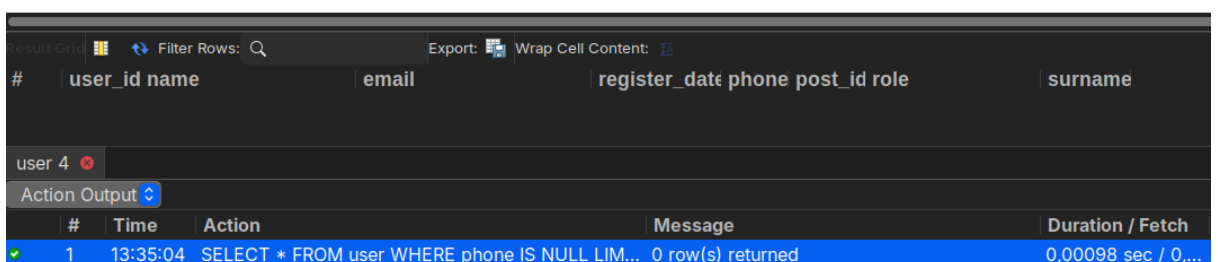
user 3 ⊗

Action Output ⇕

	#	Time	Action	Message	Duration / Fetch
✓	1	13:28:50	SELECT * FROM user WHERE role = 'admin' LIMI...	0 row(s) returned	0,00072 sec / 0,...

4. Show users who DO NOT have a phone

```
13      -- 4
14 •    SELECT * FROM user
15      WHERE phone IS NULL;
```

#	user_id name	email	register_date phone post_id role	surname

user 4 ⊗

Action Output ⇕

	#	Time	Action	Message	Duration / Fetch
✓	1	13:35:04	SELECT * FROM user WHERE phone IS NULL LIM...	0 row(s) returned	0,00098 sec / 0,...

5. Show posts whose title starts with "A"

```
17    -- 5
18 •  SELECT * FROM post
19    WHERE LEFT(title, 1) = 'A';
20
```

Result Grid	Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
#	post_id title	content	post_date	simple_date
	NULL HULL HULL	HULL	HULL	HULL

post 6 ⊗

Action Output ⬍

#	Time	Action	Message	Duration / Fetch
✓ 1	13:46:17	SELECT * FROM post WHERE LEFT(title, 1) = 'A' LIMIT 0, 1000	0 row(s) returned	0,00089 sec / 0,...

6.

a. Insert the following comments to be able to perform point

b.

INSERT INTO comment (content, comment_date, user_ID, post_ID)

VALUES ('Se ha producido un error al guardar los datos.', '2024-03-20', 1, 1), ('ERROR grave en el sistema de autenticación.', '2024-03-21', 2, 1), ('No entiendo este ErRoR que aparece al ejecutar la consulta.', '2024-03-22', 3, 2);
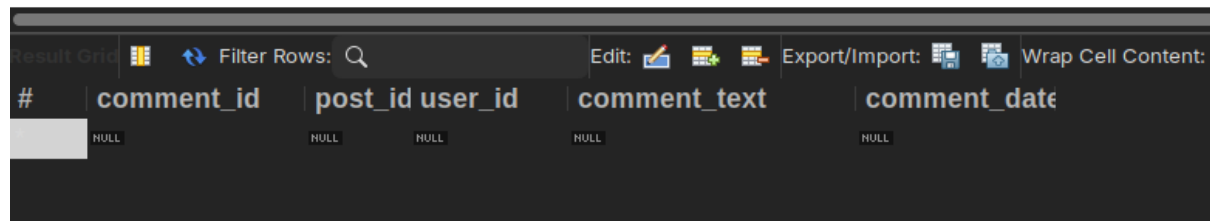
```
21    -- 6
22 •  INSERT INTO comment (comment_text, comment_date, user_ID, post_ID)
23    VALUES
24    ('Se ha producido un error al guardar los datos.', '2024-03-20', 1, 1),
25    ('ERROR grave en  el sistema de autenticación.', '2024-03-21', 2, 1),
26    ('No entiendo este ErRoR que aparece al  ejecutar la consulta.', '2024-03-22', 3, 2);
27
28
```

Action Output ⬍

#	Time	Action	Message	Duration / F
✓ 1	13:59:15	INSERT INTO comment (comment_text, comment_date, user_ID, pos...	3 row(s) affected Records: 3 Duplicates: 0 Warnings: 0	0,0043 sec

b. Show all comments that contain the word "error", even if written in uppercase, lowercase, or mixing both.
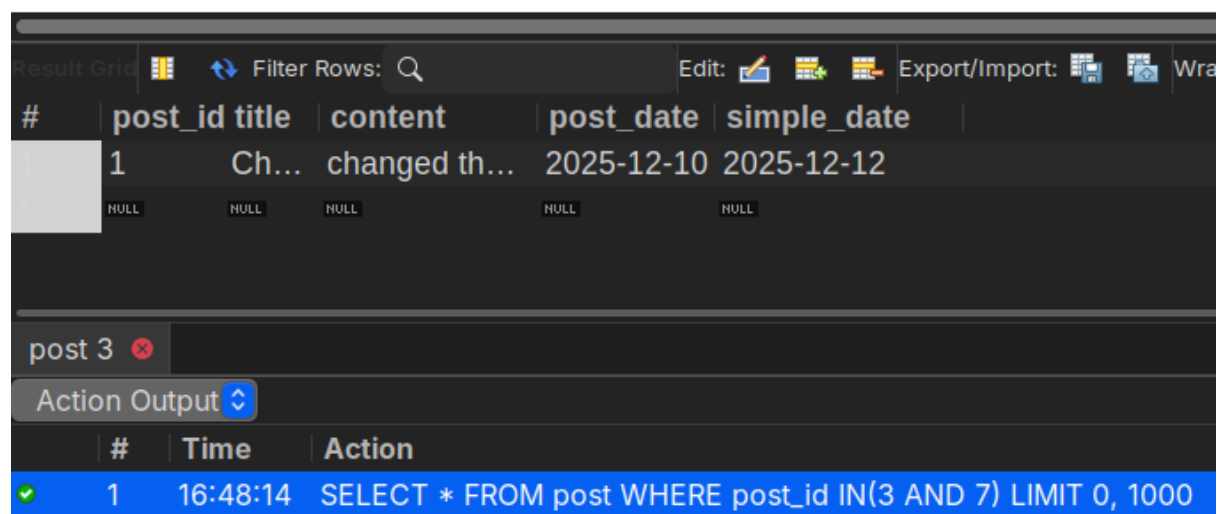
```
28      -- 6.b
29 •    SELECT * FROM comment
30      WHERE LOWER(comment_text) LIKE '%error';
31
```

#	comment_id	post_id	user_id	comment_text	comment_date
	NULL	NULL	NULL	NULL	NULL

7. Show posts whose post_ID is between 3 and 7

```
32      -- 7
33 •    SELECT * FROM post
34      WHERE post_id IN(3 AND 7);
35
```

#	post_id	title	content	post_date	simple_date	
	1	Ch...	changed th...	2025-12-10	2025-12-12	
	NULL	NULL	NULL	NULL	NULL	

post 3 ⊗

Action Output ⌃

#	Time	Action
✔ 1	16:48:14	SELECT * FROM post WHERE post_id IN(3 AND 7) LIMIT 0, 1000

8. Show users whose email ends in 'gmail.com'

```
36      -- 8
37 •    SELECT * FROM user
38      WHERE RIGHT(email, 10) = '@gmail.com';
39
```

#	user_id name	email	register_date phone post_id role

user 6 ❌

Action Output ⬍

	#	Time	Action
✅	1	16:51:41	SELECT * FROM user WHERE RIGHT(email, 10) = '@gmail.com' LIMIT 0, 1000

9. Show users whose role is admin, external, or moderator

```
40      -- 9
41 •    SELECT * FROM user
42      WHERE role = ('admin' OR 'external' OR 'moderator');
43
```

#	user_id name	email	register_date phone post_id role	surname
0	Unkno	NULL	NULL	+34- 1	normal	NULL
NULL	Ana R	ana@example.com	NULL	+34- NULL	normal	NULL

user 7 ❌

Action Output ⬍

	#	Time	Action
✅	1	16:53:39	SELECT * FROM user WHERE role = ('admin' OR 'external' OR 'moderator') LIMIT 0, 1000

10. Show posts ordered from newest to oldest

```
44      -- 10
45  •   SELECT * FROM post
46      ORDER BY post_date DESC;
47
48
```

#	post_id	title	content	post_date	simple_date	
1	2	Ch...	change con...	2025-12-11	2025-12-12	
2	1	Ch...	changed th...	2025-12-10	2025-12-12	
	NULL	NULL	NULL	NULL	NULL	

post 8 ⊗

Action Output ⌄

	#	Time	Action
✓	1	16:58:23	SELECT * FROM post ORDER BY post_date DESC LIMIT 0, 1000

11. Show the first 5 registered users

```
48      -- 11
49  •   SELECT * FROM user
50      ORDER BY register_date ASC
51      LIMIT 5;
52
53
```

#	user_id	name	email	register_date	phone	post_id	role	surname
1	0	Unkno	NULL	NULL	+34-	1	normal	NULL
2	NULL	Ana R	ana@example.com	NULL	+34-	NULL	normal	NULL

user 9 ⊗

Action Output ⌄

	#	Time	Action
✓	1	17:03:54	SELECT * FROM user ORDER BY register_date ASC LIMIT 5

12. Show the 3 oldest posts

```
53      -- 12
54 •    SELECT * FROM post
55      ORDER BY post_date DESC
56      LIMIT 3;
57
```

#	post_id	title	content	post_date	simple_date	
1	2	Ch...	change con...	2025-12-11	2025-12-12	
2	1	Ch...	changed th...	2025-12-10	2025-12-12	
	NULL	NULL	NULL	NULL	NULL	

post 10 ⊗

Action Output ⇕

	#	Time	Action
✓	1	17:05:12	SELECT * FROM post ORDER BY post_date DESC LIMIT 3

13. Order users first by role and within each role by name

```
58      -- 13
59 •    SELECT role FROM user
60      ORDER BY role ASC;
61
62
```

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

#	role
1	normal
2	normal

user 12 ⊗

Action Output ⌄

#	Time	Action
✓ 1	17:08:57	SELECT * FROM user ORDER BY role ASC LIMIT 0, 1000
✓ 2	17:09:27	SELECT role FROM user ORDER BY role ASC LIMIT 0, 1000

```
62 •    SELECT name FROM user
63      ORDER BY name ASC;
```

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

#	name
1	Ana R
2	Unkno

user 13 ⊗

Action Output ⌄

#	Time	Action
✓ 1	17:10:19	SELECT name FROM user ORDER BY name ASC LIMIT 0, 1000

14. Rename columns using AS

name AS UserName

```
65    -- 14
66 •  SELECT name AS 'UserName' FROM user;
67
```

Result Grid | ▦ | ⇄ Filter Rows: 🔍 | Export: | Wrap Cell Content:

#	UserName
1	Unkno
2	Ana R

user 14 ⊗

Action Output ⇅

#	Time	Action
✓	1	17:12:11	SELECT name AS 'UserName' FROM user LIMIT 0, 1000

registration_date AS JoinDate

```
68 •  SELECT register_date AS 'JoinDate' FROM user;
```

Result Grid | ▦ | ⇄ Filter Rows: 🔍 | Export: | Wrap Cell Content:

#	JoinDate
1	NULL
2	NULL

user 15 ⊗

Action Output ⇅

#	Time	Action
✓	1	17:13:29	SELECT register_date AS 'JoinDate' FROM user LIMIT 0, 1000

15. Show users whose name contains the letter "o" anywhere

```
70      -- 15
71 •    SELECT * FROM user
72      WHERE name LIKE '%o';
73
```

#	user_id	name	email	register_date	phone	post_id	role	surname
	0	Unkno	NULL	NULL	+34-	1	normal	NULL

user 16 ⊗

Action Output ⌄

	#	Time	Action
✔	1	17:14:52	SELECT * FROM user WHERE name LIKE '%o' LIMIT 0, 1000

16. Show users whose name contains a space in the middle

```
74      -- 16
75 •    SELECT * FROM user
76      WHERE name LIKE '% ';
77
```

#	user_id	name	email	register_date	phone	post_id	role	surname

user 17 ⊗

Action Output ⌄

	#	Time	Action
✔	1	17:15:58	SELECT * FROM user WHERE name LIKE '% ' LIMIT 0, 1000

17. Show the last 8 users according to registration_date

```
78      -- 17
79 •    SELECT * FROM user
80      ORDER BY register_date DESC
81      LIMIT 8;
82
```

#	user_id	name	email	register_date	phone	post_id	role	surname
	0	Unkno	NULL	NULL	+34-	1	normal	NULL
	NULL	Ana R	ana@example.com	NULL	+34-	NULL	normal	NULL

user 18 ⊗

Action Output ⌄

	#	Time	Action
✔	1	17:18:12	SELECT * FROM user ORDER BY register_date DESC LIMIT 8

12

18. Show posts whose title has exactly 5 characters

```
83     -- 18
84 •   SELECT * FROM post
85     WHERE LENGTH(title) = 5;
86
```

#	post_id title	content	post_date	simple_date
	NULL NULL NULL		NULL	NULL

post 1 ⊗

Action Output ⌄

	#	Time	Action	Message	Duration / Fetch
✓	1	19:22:48	SELECT * FROM post WHERE LENGTH(title) = 5 ...	0 row(s) returned	0,0081 sec / 0,0...

19. Show users who DO have a phone and order them from highest to lowest

```
87     -- 19
88 •   SELECT * FROM user
89     WHERE phone IS NOT NULL
90     ORDER BY phone DESC;
91
```

#	user_id name	email	register_date	phone	post_id	role	surname
	0 Unkno	NULL	NULL	+34-	1	normal	NULL
	NULL Ana R	ana@example.com	NULL	+34-	NULL	normal	NULL

user 2 ⊗

Action Output ⌄

|	#	Time	Action	Message	Duration / Fetch
✓	1	19:25:28	SELECT * FROM user WHERE phone IS NOT NUL...	2 row(s) returned	0,0021 sec / 0,0...

20. Design a query that shows:
- o name
- o email
- o role of users who meet ALL these conditions:
  - o The role is NOT 'admin'
  - o The name contains the letter "a"
  - o They have a phone OR their email ends in 'gmail.com'
  - o Ordered by registration_date from newest to oldest
  - o Show only the first 6 results

```
 92    -- 20
 93 •  SELECT name, email, role FROM user
 94    WHERE (
 95        role <> 'admin'
 96        AND name LIKE '%a'
 97        AND phone IS NOT NULL OR RIGHT(email, 10) = '@gmail.com'
 98    )
 99    ORDER BY register_date DESC
100    LIMIT 6;
```

#	name	email	role

user 3 ⊗

Action Output

#	Time	Action	Message	Duration / Fetch
✓	1	19:37:43	SELECT name, email, role FROM user WHERE (...	0 row(s) returned	0,00076 sec / 0,...

21. Show title, publication_date, and user_ID of the posts that meet ALL these rules:

   o The title contains the word 'SQL' OR the word 'Docker'.

   o AND, the publication_date is between '2024-01-01' and '2024-12-31', OR the publication_date is NULL (no date).

   o Order the result by publication_date from newest to oldest.

   o Show only the first 10 results.

```
105    -- 21
106 •  SELECT post_date, user_id FROM post
107    WHERE (
108        title LIKE '%SQL' OR title LIKE '%Docker'
109    )
110    AND
111    (
112        (post_date BETWEEN '2024-01-01' AND '2024-12-31')
113        OR post_date IS NULL
114    )
115    ORDER BY post_date DESC
116    LIMIT 10;
```

#	post_date	user_id

post 4 ⊗

Action Output

#	Time	Action	Message	Duration / Fetch
✓	1	20:02:19	SELECT post_date, user_id FROM post WHERE (...	0 row(s) returned	0,00077 sec / 0,...

22. Show comments filtered by content and user Show the following fields from the comment table:
- o comment_ID
- o content
  - o user_ID From the comments that meet ALL these conditions:
    - o The content starts with the word 'Error' OR contains the word 'falló' anywhere in the text.
      - o The comment was written by a user whose user_ID is in the list (1, 2, 3, 4).
      - o The content is NOT NULL.
    Additionally:
      - o Order the results by comment_ID from highest to lowest.

```
118    -- 22
119  • SELECT comment_id, comment_text, user_id FROM comment
120    WHERE (
121        LEFT(comment_text, 5) = 'Error'
122        OR comment_text LIKE '%falló'
123    )
124    AND
125    (
126        user_id IN (1, 2, 3, 4)
127    )
128    AND
129    (
130        comment_text IS NOT NULL
131    )
132    ORDER BY comment_id ASC;
133
```

#	comment_id	comment_text	user_id
	18	ERROR grave en e...	2
	NULL	NULL	NULL

comment 5 ⊗

Action Output

#	Time	Action	Message	Duration / Fetch
✓ 1	20:16:44	SELECT comment_id, comment_text, user_id FRO...	1 row(s) returned	0,0038 sec / 0,0...

23. Show name, email, and role of the users that meet:
- o (role is in the list ('external', 'guest') or the phone is NULL) OR
- o (role is 'verified' AND the email ends in '@gmail.com').
- o Additionally:
  - o Order the results first by role (ascending) and, within each role, by name (ascending).
  - o Show only the first 15 results.

```
134    -- 23
135 •  SELECT name, email, role FROM user
136  ⊖ WHERE (
137        role IN('extern' AND 'guest')
138        OR phone IS NULL
139     )
140     OR
141  ⊖ (
142        role = 'verified'
143        AND RIGHT(email, 10) = '@gmail.com'
144     )
145     ORDER BY role ASC, name ASC
146     LIMIT 15;
147
```

#	name	email	role
	Ana R	ana@example.com	normal
	Unkno	NULL	normal

user 1 ⊗

Action Output ⌄

#	Time	Action	Message	Duration / Fetch
✔ 1	20:28:32	SELECT name, email, role FROM user WHERE (...	2 row(s) returned	0,0014 sec / 0,00...

Activity Submission

Export the complete document to PDF and upload it to Google Classroom.