

В цій лабораторній роботі, використовуються онлайн аналітична обробка. Використано різні методи та способи реалізації, різні агрегатні функції та об'єднання таблиць.

```
17 SELECT hero_name, team_id
18 FROM superheroes
19 GROUP BY team_id, hero_name
20 HAVING team_id > 2;
21
```

Data Output Messages Notifications



| | hero_name character varying (100) | team_id integer |
|----|--------------------------------------|--------------------|
| 1 | Mr. Fantastic | 6 |
| 2 | Beast Boy | 5 |
| 3 | Wolverine | 3 |
| 4 | Daredevil | 4 |
| 5 | Doctor Strange | 4 |
| 6 | Starfire | 5 |
| 7 | Storm | 3 |
| 8 | Cyclops | 3 |
| 9 | Jean Grey | 3 |
| 10 | Human Torch | 6 |
| 11 | Luke Cage | 4 |
| 12 | Professor X | 3 |
| 13 | Robin | 5 |
| 14 | Invisible Woman | 6 |

Query

Query History

1

SELECT MIN(power_level) AS power

2

FROM superheroes;

Data Output

Messages

Notifications

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SQL

| | power | integer |
|---|-------|---------|
| 1 | 70 | |

Query

Query History

1

SELECT MAX(power_level) AS power

2

FROM superheroes;

Data Output

Messages

Notifications

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SQL

| | power | integer |
|---|-------|---------|
| 1 | 98 | |

```

21
22 SELECT team_id, hero_name, COUNT(*)
23 FROM superheroes
24 WHERE power_level < 90 AND power_level > 75
25 GROUP BY first_appearance, team_id, hero_name;
26
27

```

Data Output Messages Notifications

| | team_id integer | hero_name character varying (100) | count bigint |
|----|--------------------|--------------------------------------|-----------------|
| 1 | 1 | Batman | 1 |
| 2 | 1 | Aquaman | 1 |
| 3 | 2 | Captain America | 1 |
| 4 | 1 | Green Lantern | 1 |
| 5 | 6 | Human Torch | 1 |
| 6 | 6 | Invisible Woman | 1 |
| 7 | 6 | Mr. Fantastic | 1 |
| 8 | 2 | Spider-Man | 1 |
| 9 | 2 | Iron Man | 1 |
| 10 | 3 | Cyclops | 1 |
| 11 | 3 | Jean Grey | 1 |
| 12 | 3 | Professor X | 1 |
| 13 | 4 | Daredevil | 1 |
| 14 | 2 | Black Panther | 1 |
| 15 | 4 | Luke Cage | 1 |

Query Query History

```

1 SELECT SUM(power_level) AS power_sum
2 FROM superheroes;

```

Data Output Messages Notifications

| | power_sum bigint |
|---|---------------------|
| 1 | 2509 |

```

27 SELECT
28     h.hero_name,
29     h.real_name,
30     t.team_name,
31     u.name as universe
32 FROM superheroes h
33 INNER JOIN universes u ON h.universe_id = u.id
34 INNER JOIN teams t ON h.team_id = t.id;
35

```

Data Output Messages Notifications

| | hero_name character varying (100) 🔒 | real_name character varying (100) 🔒 | team_name character varying (100) 🔒 | universe character varying (50) 🔒 |
|----|--|--|--|--------------------------------------|
| 6 | Hawkeye | Clint Barton | Avengers | Marvel |
| 7 | Spider-Man | Peter Parker | Avengers | Marvel |
| 8 | Black Panther | T'Challa | Avengers | Marvel |
| 9 | Scarlet Witch | Wanda Maximoff | Avengers | Marvel |
| 10 | Doctor Strange | Stephen Strange | Defenders | Marvel |
| 11 | Wolverine | Logan | X-Men | Marvel |
| 12 | Cyclops | Scott Summers | X-Men | Marvel |
| 13 | Storm | Ororo Munroe | X-Men | Marvel |
| 14 | Professor X | Charles Xavier | X-Men | Marvel |
| 15 | Jean Grey | Jean Grey | X-Men | Marvel |
| 16 | Daredevil | Matt Murdock | Defenders | Marvel |

Query Query History

```
1 SELECT AVG(power_level) AS power_sum
2 FROM superheroes;
```

Data Output Messages Notifications



| | power_sum numeric | |
|---|----------------------|--|
| 1 | 83.63333333333333 | |