

TUGAS MYSQL

Nama:
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1. Buatlah tabel nya menggunakan query sql!

```
-- Creating Tables --
CREATE TABLE roles (
    id INT PRIMARY KEY AUTO_INCREMENT,
    name VARCHAR(255)
);

CREATE TABLE users (
    id INT AUTO_INCREMENT,
    name VARCHAR(255),
    email VARCHAR(255),
    password VARCHAR(255),
    gender CHAR,
    photo VARCHAR(255),
    address VARCHAR(255),
    role INT,
    PRIMARY KEY (id),
    CONSTRAINT FK_RoleUser FOREIGN KEY (role) REFERENCES roles(id)
);

CREATE TABLE ac (
    id INT PRIMARY KEY AUTO_INCREMENT,
    name VARCHAR(255),
    brand VARCHAR(255),
    pk FLOAT(4, 1),
    price INT
);

CREATE TABLE services (
    id INT AUTO_INCREMENT,
    technician_id INT,
    client_id INT,
    ac_id INT,
    date DATE,
    status ENUM('unpaid', 'paid', 'on repair', 'finish'),
    PRIMARY KEY (id),
    CONSTRAINT FK_ClientService FOREIGN KEY (client_id) REFERENCES
users(id),
    CONSTRAINT FK_TechnicianService FOREIGN KEY (technician_id)
REFERENCES users(id),
    CONSTRAINT FK_AcService FOREIGN KEY (ac_id) REFERENCES ac(id)
);
```

-- Inserting Data --

INSERT INTO roles

(name)

VALUES

('admin'),
('technician'),
('client');

INSERT INTO users

(name, email, password, gender, photo, address, role)

VALUES

('Fulan', 'fulan@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 1),
('Fulanah', 'fulanah@gmail.com', '*****', 'P',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 2),
('Ardi', 'ardi@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 2),
('Samsudin', 'samsudin@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 2),
('Eko', 'eko@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 2),
('Sugeng', 'sugeng@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3),
('Alif', 'alif@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3),
('Siti', 'siti@gmail.com', '*****', 'P',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3),
('Juminten', 'juminten@gmail.com', '*****', 'P',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3),
('Paijo', 'paijo@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3),
('Saifuddin', 'saifuddin@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3),
('Daffa', 'daffa@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3),
('Akbar', 'akbar@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3),
('Rafli', 'rafli@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3),
('Rini', 'rini@gmail.com', '*****', 'L',
'https://lorem.ipsum/dolor.png', 'Jl. Cisitu Indah VI no 6', 3);

INSERT INTO ac

(name, brand, pk, price)

VALUES

('LG-1', 'LG', 0.5, 50000),
('Sharp-2', 'Sharp', 1, 60000),
('Panasonic-3', 'Panasonic', 2, 70000),
('Samsung-4', 'Samsung', 0.5, 80000),
('Daikin-5', 'Daikin', 1, 90000),

```

('Gree-6', 'Gree', 2, 100000),
('Polytron-7', 'Polytron', 0.5, 110000),
('Electrolux-8', 'Electrolux', 1, 120000),
('Aqua-9', 'Aqua', 2, 130000),
('Midea-10', 'Midea', 0.5, 140000),
('LG-11', 'LG', 1, 200000),
('Sharp-12', 'Sharp', 2, 210000),
('Panasonic-13', 'Panasonic', 0.5, 220000),
('Samsung-14', 'Samsung', 1, 230000),
('Daikin-15', 'Daikin', 2, 240000),
('Gree-16', 'Gree', 0.5, 250000),
('Polytron-17', 'Polytron', 1, 260000),
('Electrolux-18', 'Electrolux', 2, 270000),
('Aqua-19', 'Aqua', 0.5, 280000),
('Midea-20', 'Midea', 1, 290000);

```

```

INSERT INTO services

```

```

(id, technician_id, client_id, ac_id, date, status)

```

```

VALUES

```

```

('1', '2', '6', '1', '2020-06-01', 'finish'),
('2', '3', '7', '2', '2020-05-01', 'finish'),
('3', '4', '8', '3', '2020-06-02', 'finish'),
('4', '5', '9', '4', '2021-03-03', 'finish'),
('5', '2', '6', '5', '2021-12-05', 'finish'),
('6', '3', '7', '6', '2021-12-25', 'finish'),
('7', '4', '10', '7', '2022-06-01', 'finish'),
('8', '5', '11', '8', '2022-02-02', 'finish'),
('9', '2', '6', '9', '2022-04-04', 'finish'),
('10', '3', '7', '10', '2023-05-05', 'on repair'),
('11', '4', '12', '11', '2023-06-06', 'on repair'),
('12', '5', '13', '12', '2023-07-07', 'on repair'),
('13', '2', '6', '13', '2023-08-08', 'paid'),
('14', '3', '7', '14', '2023-09-09', 'paid'),
('15', '4', '14', '15', '2023-10-10', 'unpaid');

```

-- Screenshot --

Menampilkan baris 0 - 19 (total 20, Pencarian dilakukan dalam 0,0002 detik.)

SELECT * FROM `ac`

Profil [Edit dikotak] [Ubah] [Jelaskan SQL] [Buat kode PHP] [Segarkan]

☐ Tampilkan semua | Jumlah baris: 25 | Saring baris: Cari di tabel ini | Sort by key: Tidak ada

Extra options

			id	name	brand	pk	price
<input type="checkbox"/>	Ubah	Salin	Hapus	1	LG-1	LG	0.5 50000
<input type="checkbox"/>	Ubah	Salin	Hapus	2	Sharp-2	Sharp	1.0 60000
<input type="checkbox"/>	Ubah	Salin	Hapus	3	Panasonic-3	Panasonic	2.0 70000
<input type="checkbox"/>	Ubah	Salin	Hapus	4	Samsung-4	Samsung	0.5 80000
<input type="checkbox"/>	Ubah	Salin	Hapus	5	Daikin-5	Daikin	1.0 90000
<input type="checkbox"/>	Ubah	Salin	Hapus	6	Gree-6	Gree	2.0 100000
<input type="checkbox"/>	Ubah	Salin	Hapus	7	Polytron-7	Polytron	0.5 110000
<input type="checkbox"/>	Ubah	Salin	Hapus	8	Electrolux-8	Electrolux	1.0 120000
<input type="checkbox"/>	Ubah	Salin	Hapus	9	Aqua-9	Aqua	2.0 130000
<input type="checkbox"/>	Ubah	Salin	Hapus	10	Midea-10	Midea	0.5 140000
<input type="checkbox"/>	Ubah	Salin	Hapus	11	LG-11	LG	1.0 200000
<input type="checkbox"/>	Ubah	Salin	Hapus	12	Sharp-12	Sharp	2.0 210000

Tabel AC

Menampilkan baris 0 - 2 (total 3, Pencarian dilakukan dalam 0,0004 detik.)

SELECT * FROM `roles`

Profil [Edit dikotak] [Ubah] [Jelaskan SQL] [Buat kode PHP] [Segarkan]

☐ Tampilkan semua | Jumlah baris: 25 | Saring baris: Cari di tabel ini | Sort by key: Tidak ada

Extra options

			id	name
<input type="checkbox"/>	Ubah	Salin	Hapus	1 admin
<input type="checkbox"/>	Ubah	Salin	Hapus	2 technician
<input type="checkbox"/>	Ubah	Salin	Hapus	3 client

Pilih Semua Dengan pilihan: ☐ Ubah ☐ Salin ☐ Hapus ☐ Ekspor

☐ Tampilkan semua | Jumlah baris: 25 | Saring baris: Cari di tabel ini | Sort by key: Tidak ada

Operasi hasil kueri

Cetak ☐ Salin ke clipboard ☐ Ekspor ☐ Tampilkan bagian ☐ Buat tampilan

Markahi kueri SQL ini

Judul: ☐ Izinkan semua pengguna untuk mengakses markah ini

Tabel Roles

Menampilkan baris 0 - 14 (total 15, Pencarian dilakukan dalam 0,0003 detik)

SELECT * FROM `services`

Tampilkan semua | Jumlah baris: 25 | Saring baris: Cari di tabel ini | Sort by key: Tidak ada

	id	technician_id	client_id	ac_id	date	status
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	1	2	6	1	2020-06-01	finish
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	2	3	7	2	2020-05-01	finish
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	3	4	8	3	2020-06-02	finish
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	4	5	9	4	2021-03-03	finish
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	5	2	6	5	2021-12-05	finish
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	6	3	7	6	2021-12-25	finish
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	7	4	10	7	2022-06-01	finish
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	8	5	11	8	2022-02-02	finish
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	9	2	6	9	2022-04-04	finish
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	10	3	7	10	2023-05-05	on repair
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	11	4	12	11	2023-06-06	on repair
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	12	5	13	12	2023-07-07	on repair

Tabel Services

Menampilkan baris 0 - 14 (total 15, Pencarian dilakukan dalam 0,0004 detik)

SELECT * FROM `users`

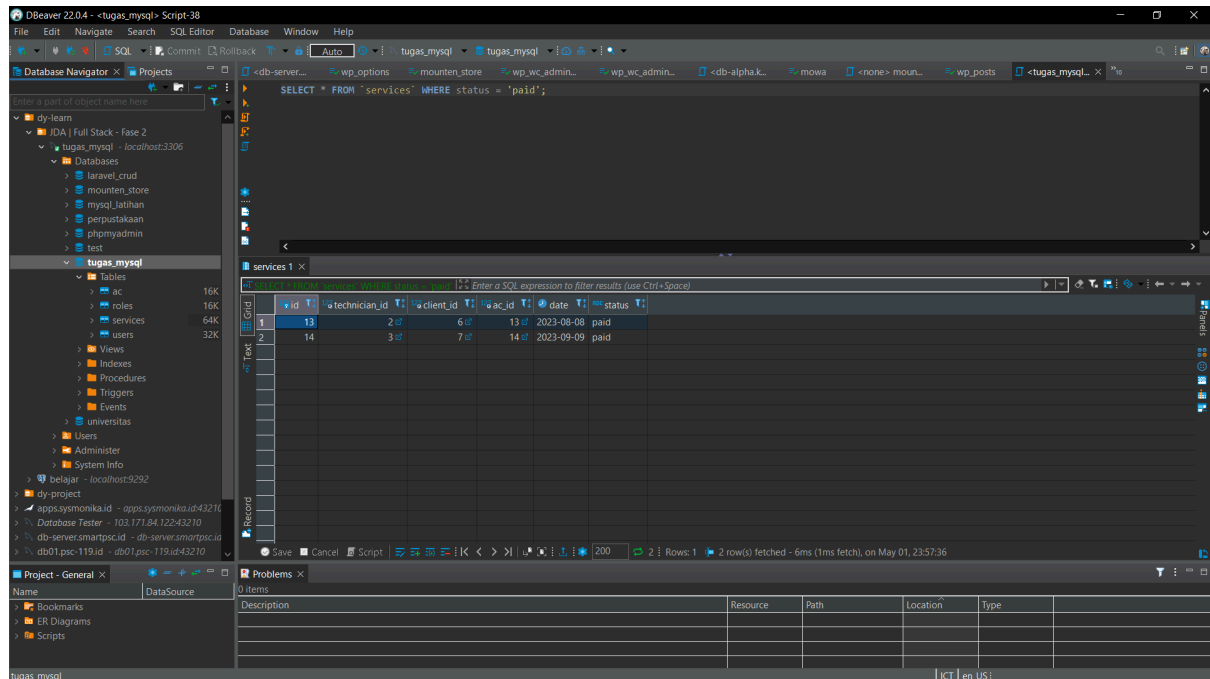
Tampilkan semua | Jumlah baris: 25 | Saring baris: Cari di tabel ini | Sort by key: Tidak ada

	id	name	email	password	gender	photo	address	role
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	1	Fulan	fulan@gmail.com	*****	L	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	1
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	2	Fulanah	fulanah@gmail.com	*****	P	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	2
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	3	Ardi	ardi@gmail.com	*****	L	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	2
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	4	Samsudin	samsudin@gmail.com	*****	L	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	2
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	5	Eko	eko@gmail.com	*****	L	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	2
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	6	Sugeng	sugeng@gmail.com	*****	L	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	3
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	7	Alif	alif@gmail.com	*****	L	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	3
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	8	Siti	siti@gmail.com	*****	P	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	3
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	9	Juminten	juminten@gmail.com	*****	P	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	3
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	10	Paijo	paijo@gmail.com	*****	L	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	3
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	11	Saifuddin	saifuddin@gmail.com	*****	L	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	3
<input type="checkbox"/> Ubah <input type="checkbox"/> Salin <input type="checkbox"/> Hapus	12	Daffa	daffa@gmail.com	*****	L	https://lorem.ipsum/dolor.png	Jl. Cisituh Indah VI no 6	3

Tabel Users

2. Tampilkan jumlah perbaikan yang sudah dibayar!

```
SELECT * FROM `services` WHERE status = 'paid';
```

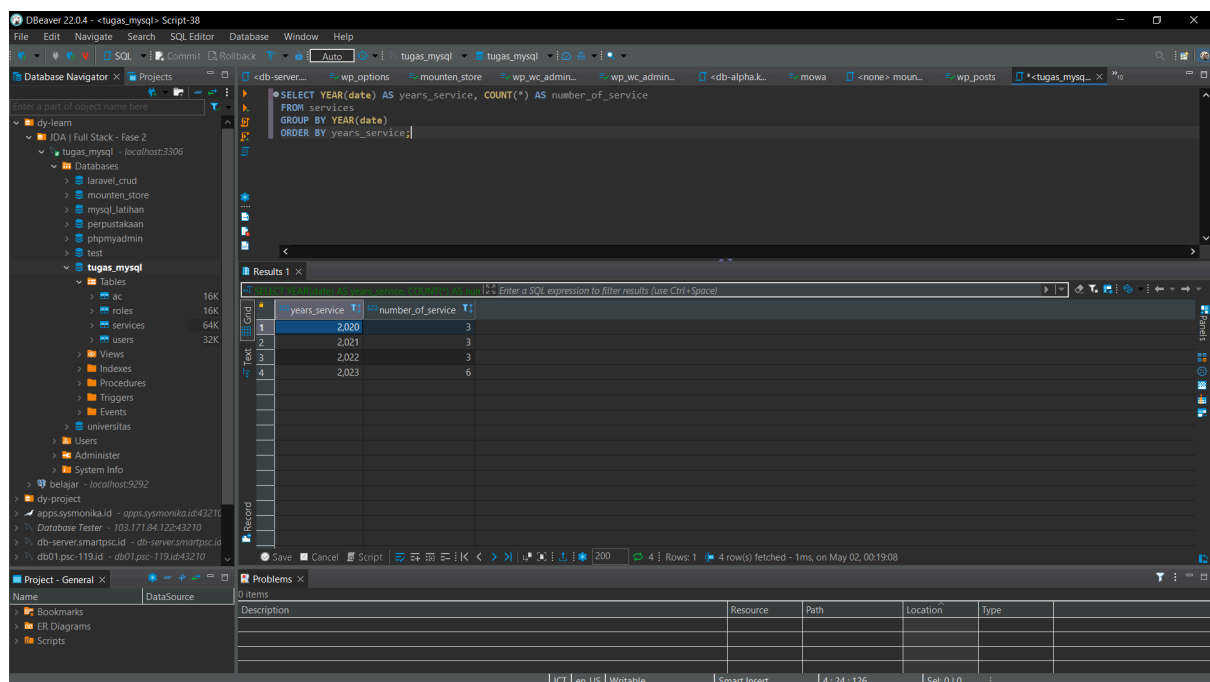


The screenshot shows the DBeaver 22.0.4 interface. The SQL Editor contains the query: `SELECT * FROM `services` WHERE status = 'paid';`. The Results window displays the following data:

	id	technician_id	client_id	date	status
1	13	2	6	2023-08-08	paid
2	14	3	7	2023-09-09	paid

3. Tampilkan tahun beserta jumlah perbaikan yang dilakukan pada tahun tersebut!

```
SELECT YEAR(date) AS years_service, COUNT(*) AS number_of_service  
FROM services  
GROUP BY YEAR(date)  
ORDER BY years_service;
```

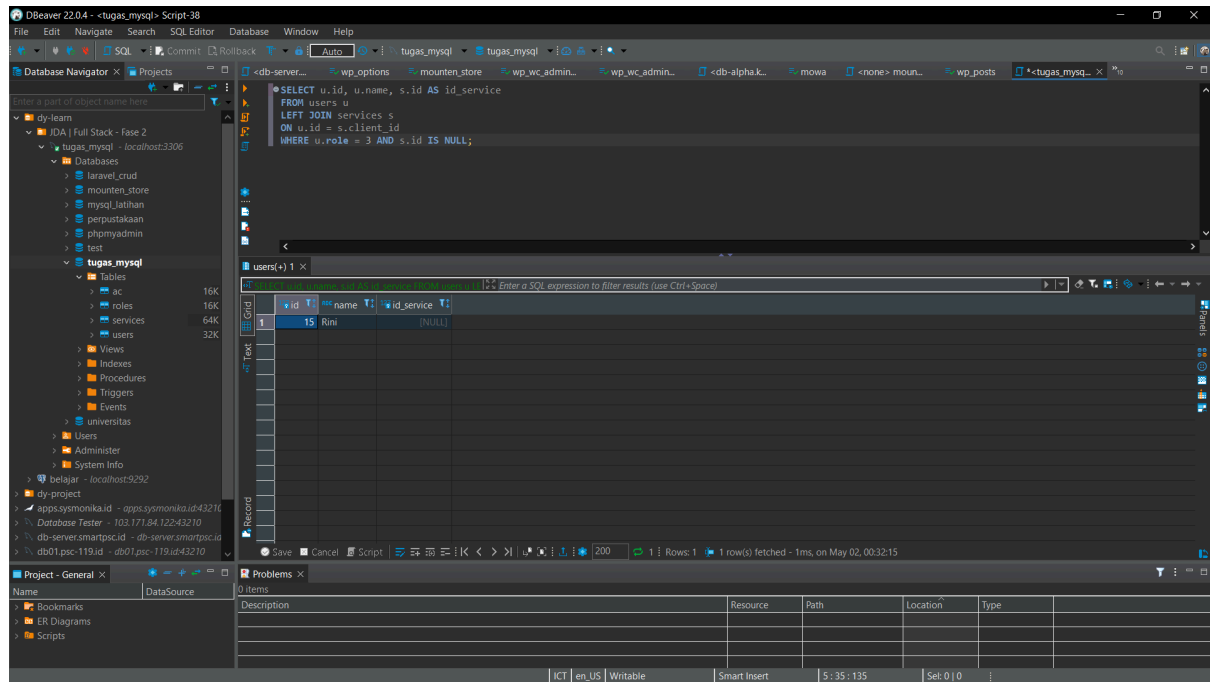


The screenshot shows the DBeaver 22.0.4 interface. The SQL Editor contains the query: `SELECT YEAR(date) AS years_service, COUNT(*) AS number_of_service FROM services GROUP BY YEAR(date) ORDER BY years_service;`. The Results window displays the following data:

	years_service	number_of_service
1	2020	3
2	2021	3
3	2022	3
4	2023	6

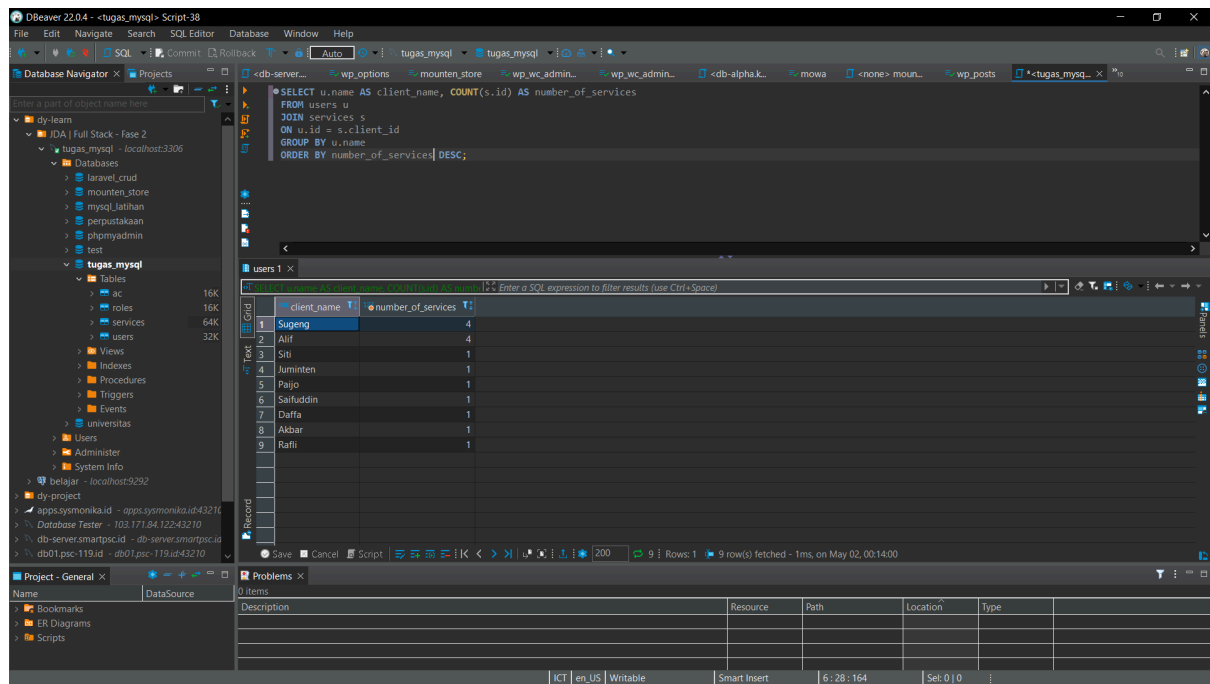
4. Tampilkan data client yang tidak pernah melakukan perbaikan ac!

```
SELECT u.id, u.name, s.id AS id_service
FROM users u
LEFT JOIN services s
ON u.id = s.client_id
WHERE u.role = 3 AND s.id IS NULL;
```



5. Tampilkan data client beserta jumlah perbaikan yang dilakukan, urutkan berdasarkan perbaikan terbanyak!

```
SELECT u.name AS client_name, COUNT(s.id) AS number_of_services
FROM users u
JOIN services s ON u.id = s.client_id
GROUP BY u.name
ORDER BY number_of_services DESC;
```



6. Tampilkan data technician beserta jumlah uang yang diperoleh, urutkan berdasarkan perolehan terbanyak!

```
SELECT s.technician_id, u.name AS technician_name, SUM(ac.price) AS
income_amount FROM users u
JOIN services s
ON u.id = s.technician_id
JOIN ac
ON s.ac_id = ac.id
WHERE s.status <> 'unpaid'
GROUP BY u.name
ORDER BY income_amount DESC;
```

