**Praktikum 2 Sistem Basis Data 2023**

**NRP / Nama : Mohammad Hanif Furqan Aufa Putra  
Kelas : J**

**RDBMS : My SQL**

**Link SQL :** [**https://drive.google.com/drive/folders/1Tp4u8BMsi9BVIfosaRRIDv-8cM37Dh\_B?usp=drive\_link**](https://drive.google.com/drive/folders/1Tp4u8BMsi9BVIfosaRRIDv-8cM37Dh_B?usp=drive_link)

**Kode Asdos : J002**

**Sesi : Praktikum, Sabtu 11 November 2023**

**Nomor 1**

Sintaks:

CREATE TABLE

    pelanggan (

        p\_id CHAR(16) NOT NULL,

        p\_nama VARCHAR(60) NOT NULL,

        p\_no\_telp VARCHAR(15) NOT NULL,

        p\_email VARCHAR(256),

        p\_alamat VARCHAR(50) NOT NULL,

        PRIMARY KEY (p\_id)

    );

CREATE TABLE

    mekanik (

        mk\_id CHAR(6) NOT NULL,

        mk\_nama VARCHAR(60) NOT NULL,

        PRIMARY KEY (mk\_id)

    );

CREATE TABLE

    suku\_cadang (

        sc\_id CHAR(7) NOT NULL,

        sc\_nama VARCHAR(120) NOT NULL,

        sc\_deskripsi VARCHAR(100) NOT NULL,

        sc\_harga DECIMAL(10, 2) NOT NULL,

        PRIMARY KEY (sc\_id)

    );

CREATE TABLE

    mobil (

        mb\_vin CHAR(17) NOT NULL,

        mb\_merk VARCHAR(20) NOT NULL,

        mb\_tipe VARCHAR(30) NOT NULL,

        mb\_tahun INTEGER NOT NULL,

        mb\_warna VARCHAR(20) NOT NULL,

        mb\_p\_id CHAR(16) NOT NULL,

        PRIMARY KEY (mb\_vin),

        CONSTRAINT mobil\_pelanggan\_FK FOREIGN KEY (mb\_p\_id) REFERENCES pelanggan (p\_id)

    );

CREATE TABLE

    tiket\_servis (

        ts\_id CHAR(8) NOT NULL,

        ts\_waktu\_masuk TIMESTAMP NOT NULL,

        ts\_waktu\_keluar TIMESTAMP NULL,

        ts\_deskripsi VARCHAR(400) NOT NULL,

        ts\_komentar VARCHAR(400),

        ts\_p\_id CHAR(16) NOT NULL,

        ts\_mb\_vin CHAR(17) NOT NULL,

        PRIMARY KEY (ts\_id),

        CONSTRAINT ts\_p\_FK FOREIGN KEY (ts\_p\_id) REFERENCES pelanggan (p\_id),

        CONSTRAINT ts\_mb\_FK FOREIGN KEY (ts\_mb\_vin) REFERENCES mobil (mb\_vin)

    );

CREATE TABLE

    mekanik\_servis (

        mksv\_mk\_id CHAR(6) NOT NULL,

        mksv\_ts\_id CHAR(8) NOT NULL,

        PRIMARY KEY (mksv\_mk\_id, mksv\_ts\_id),

        CONSTRAINT ms\_mk\_FK FOREIGN KEY (mksv\_mk\_id) REFERENCES mekanik (mk\_id),

        CONSTRAINT ms\_ts\_FK FOREIGN KEY (mksv\_ts\_id) REFERENCES tiket\_servis (ts\_id)

    );

CREATE TABLE

    suku\_cadang\_servis (

        scsv\_ts\_id CHAR(8) NOT NULL,

        scsv\_sc\_id CHAR(7) NOT NULL,

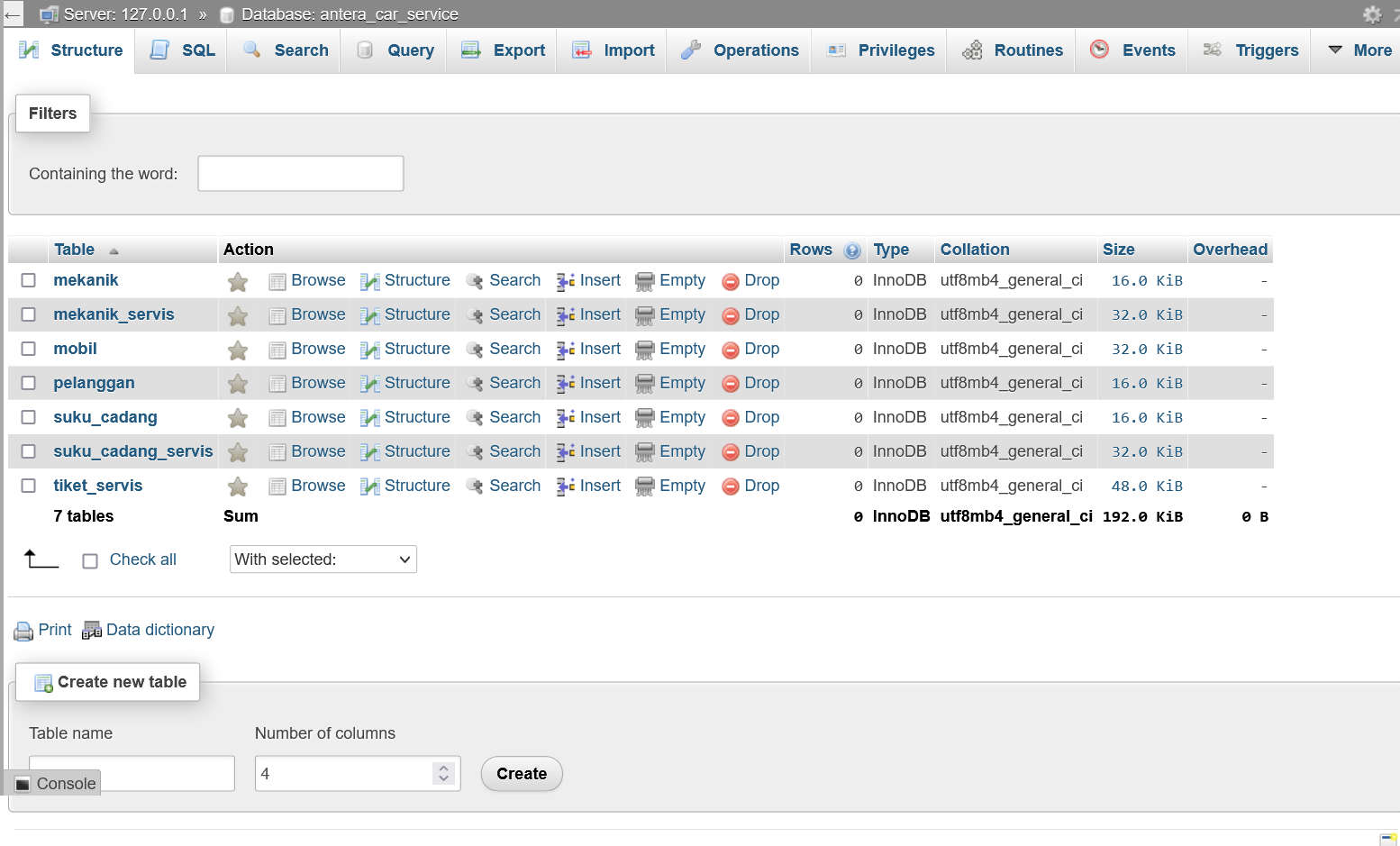
        PRIMARY KEY (scsv\_ts\_id, scsv\_sc\_id),

        CONSTRAINT scs\_ts\_FK FOREIGN KEY (scsv\_ts\_id) REFERENCES tiket\_servis (ts\_id),

        CONSTRAINT scs\_cs\_FK FOREIGN KEY (scsv\_sc\_id) REFERENCES suku\_cadang (sc\_id)

    );

Hasil:



**Nomor 2**

Sintaks:

CREATE TABLE

    supplier (

        sp\_id CHAR(6) NOT NULL,

        sp\_nama VARCHAR(60) NOT NULL,

        sp\_no\_telp VARCHAR(15) NOT NULL,

        sp\_email VARCHAR(256),

        sp\_alamat VARCHAR(100) NOT NULL,

        PRIMARY KEY (sp\_id)

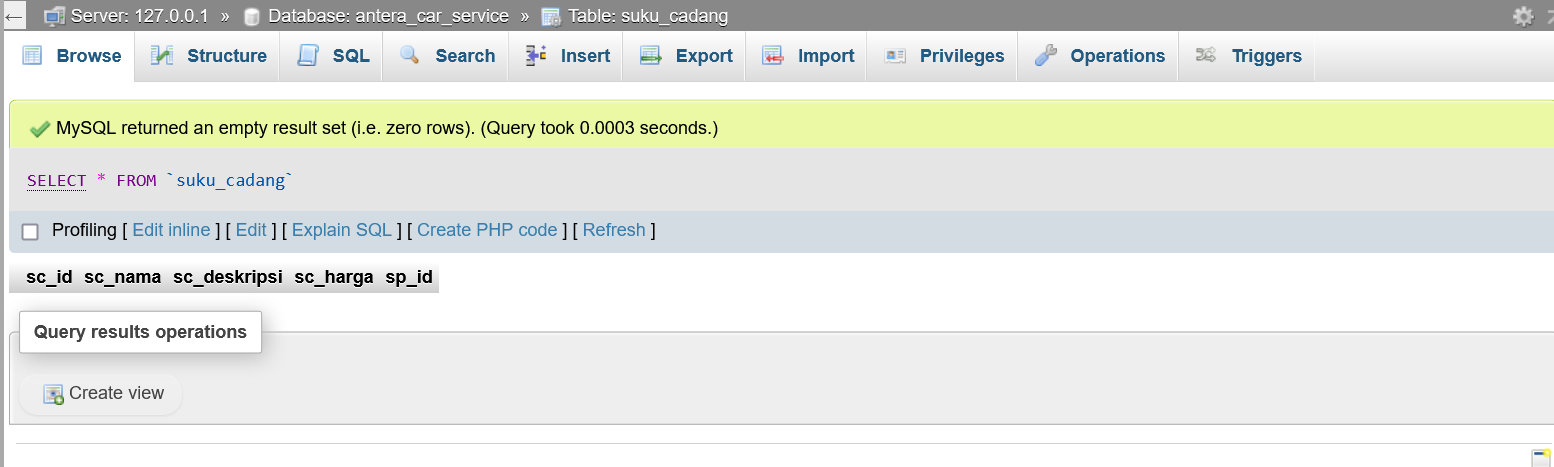
    );

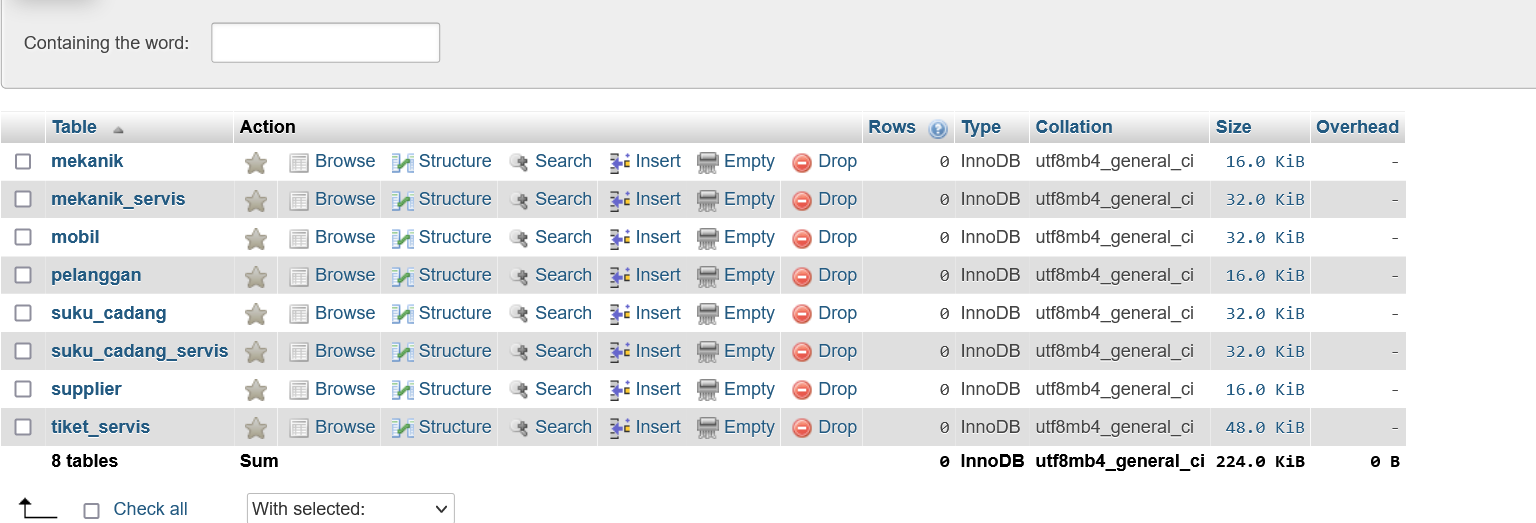
ALTER TABLE suku\_cadang

ADD COLUMN sp\_id CHAR(6),

ADD CONSTRAINT sc\_sp\_FK FOREIGN KEY (sp\_id) REFERENCES supplier (sp\_id);

Hasil:





**Nomor 3**

Sintaks:

ALTER TABLE mekanik

RENAME TO pegawai;

CREATE TABLE

    posisi (

        ps\_id CHAR(6) NOT NULL,

        ps\_nama VARCHAR(15) NOT NULL,

        PRIMARY KEY (ps\_id)

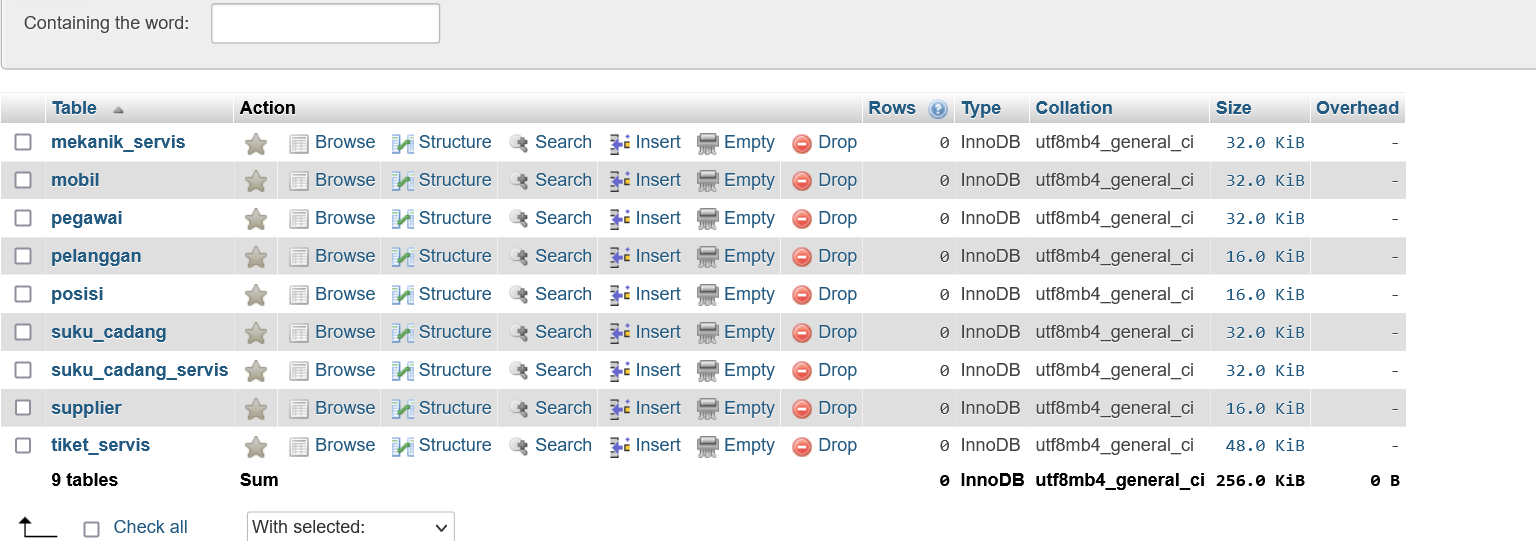
    );

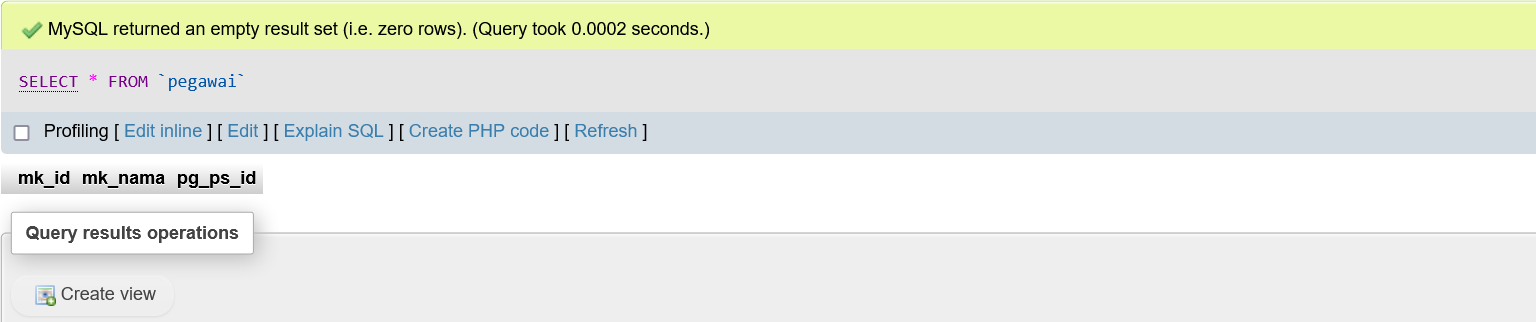
ALTER TABLE pegawai

ADD COLUMN pg\_ps\_id CHAR(6) NOT NULL,

ADD CONSTRAINT pg\_ps\_FK FOREIGN KEY (pg\_ps\_id) REFERENCES posisi (ps\_id);

Hasil:





**Nomor 4**

Sintaks:

ALTER TABLE pegawai

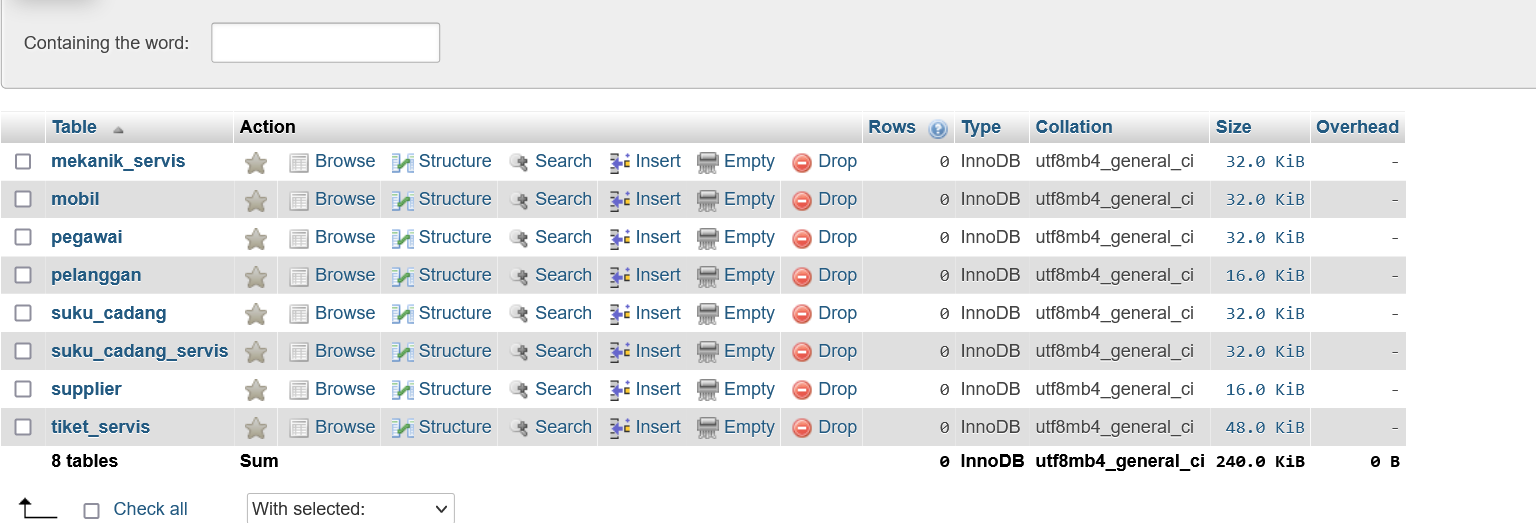
DROP FOREIGN KEY pg\_ps\_FK;

DROP TABLE posisi;

ALTER TABLE pegawai

ADD COLUMN mk\_posisi VARCHAR(15);

Hasil:



**Nomor 5**

Sintaks:

INSERT INTO

    pelanggan (p\_id, p\_nama, p\_no\_telp, p\_email, p\_alamat)

VALUES

    (

        '3225011201880002',

        'Andy Williams',

        '62123456789',

        'andy@gmail.com',

        'Jl. Apel no 1'

    ),

    (

        '3525010706950001',

        'Marshall Paul',

        '621451871011',

        'paulan@gmail.com',

        'Jl. Jeruk no 12'

    ),

    (

        '3525016005920002',

        'Kazuya Tanaka',

        '62123456789',

        'kazuya@gmail.com',

        'Jl. JKT no 48'

    ),

    (

        '3975311107780001',

        'Budi Prumtomo',

        '621545458901',

        NULL,

        'Jl. Nanas no 45'

    ),

    (

        '3098762307810002',

        'Razai Ambudi',

        '621898989102',

        NULL,

        'Jl. Mangga no 2'

    );

INSERT INTO

    mobil (

        mb\_vin,

        mb\_p\_id,

        mb\_merk,

        mb\_tipe,

        mb\_tahun,

        mb\_warna

    )

VALUES

    (

        'JN8AZ1MW4BW678706',

        '3225011201880002',

        'Nissan',

        'Murano',

        2011,

        'biru'

    ),

    (

        '2LMTJ8JP0GSJ00175',

        '3525010706950001',

        'Lincoln',

        'MKX',

        2016,

        'merah'

    ),

    (

        'ZFF76ZHT3E0201920',

        '3975311107780001',

        'Ferrari',

        'Ferrari',

        2014,

        'merah'

    ),

    (

        '1HGCP26359A157554',

        '3225011201880002',

        'Honda',

        'Accord',

        2009,

        'hitam'

    ),

    (

        '5YJSA1DN5CFP01785',

        '3098762307810002',

        'Tesla',

        'Model S',

        2012,

        'putih'

    );

INSERT INTO

    pegawai (mk\_id, mk\_nama, mk\_posisi)

VALUES

    ('MK0001', 'Walter Jones', 'mekanik'),

    ('MK0002', 'Kentaki Veraid', 'kasir'),

    ('MK0003', 'Leo', 'mekanik'),

    ('MK0004', 'Reyhand Janita', 'pencuci'),

    ('MK0005', 'Elizabeth Alexandra', 'mekanik');

INSERT INTO

    supplier (sp\_id, sp\_nama, sp\_no\_telp, sp\_email, sp\_alamat)

VALUES

    (

        'SP0001',

        'Indotrading',

        '6282283741247',

        'indotrading@rocketmail.com',

        'Jl. Bambu no 5'

    ),

    (

        'SP0002',

        'Jayasinda',

        '628227428238',

        'Jayasinda@yahoo.com',

        'Jl. Padi no 12'

    ),

    (

        'SP0003',

        'S A S Autoparts',

        '6282212382311',

        'sasparts@gmail.com',

        'Jl. Sorghum no 24'

    );

INSERT INTO

    suku\_cadang (sc\_id, sc\_nama, sc\_deskripsi, sc\_harga)

VALUES

    (

        'SC00001',

        'Damper',

        'Damper Per Belakang Original',

        800000.00

    ),

    (

        'SC00002',

        'Coil Ignition',

        'Coil Ignition Denso Jepang',

        550000.00

    ),

    (

        'SC00003',

        'Selang Filter',

        'Selang Filter Udara Original',

        560000.00

    ),

    (

        'SC00004',

        'Bushing',

        'Bushing Upper arm Original',

        345000.00

    ),

    (

        'SC00005',

        'Radiator Racing',

        'Radiator Kotorad Manual Diesel',

        675000.00

    );

INSERT INTO

    tiket\_servis (

        ts\_id,

        ts\_waktu\_masuk,

        ts\_waktu\_keluar,

        ts\_deskripsi,

        ts\_komentar,

        ts\_p\_id,

        ts\_mb\_vin

    )

VALUES

    (

        'TS000001',

        '2023-11-05 08:00:00',

        '2023-11-05 16:30:00',

        'Mobil mengalami getaran yang tidak normal saat berkendara. Untuk memperbaikinya, kami akan mengganti damper yang aus dan juga bushing yang telah rusak.',

        'Saya sangat puas dengan perbaikan ini. Mobil saya sekarang berjalan lebih halus dan getarannya hilang. Terima kasih atas pelayanan yang baik!',

        '3098762307810002',

        '5YJSA1DN5CFP01785'

    ),

    (

        'TS000002',

        '2023-11-05 08:00:00',

        '2023-11-05 16:30:00',

        'Mobil mengalami getaran yang tidak normal saat berkendara. Untuk memperbaikinya, kami akan mengganti damper yang aus dan juga bushing yang telah rusak.',

        'Saya sangat puas dengan perbaikan ini. Mobil saya sekarang berjalan lebih halus dan getarannya hilang. Terima kasih atas pelayanan yang baik!',

        '3975311107780001',

        'ZFF76ZHT3E0201920'

    ),

    (

        'TS000003',

        '2023-11-06 10:30:00',

        '2023-11-06 18:15:00',

        'Untuk meningkatkan kinerja pendinginan mesin, kami akan membersihkan radiator dan memeriksa apakah ada kerusakan atau kebocoran. Jika diperlukan, kami akan mengganti komponen yang rusak. Mobil mengalami masalah saat memasok bahan bakar ke mesin. Masalah ini terjadi karena selang filter bahan bakar yang tersumbat. Kami akan menggantinya sehingga aliran bahan bakar menjadi lancar kembali',

        'Setelah penggantian selang filter bahan bakar, mobil saya kembali berjalan dengan lancar. Tidak ada lagi masalah pengiriman bahan bakar. Pelayanan yang sangat membantu',

        '3525016005920002',

        '2LMTJ8JP0GSJ00175'

    ),

    (

        'TS000004',

        '2023-11-06 11:45:00',

        '2023-11-06 19:30:00',

        'Mobil mengalami masalah saat memasok bahan bakar ke mesin. Masalah ini terjadi karena selang filter bahan bakar yang tersumbat. Kami akan menggantinya sehingga aliran bahan bakar menjadi lancar kembali.',

        'Setelah penggantian selang filter bahan bakar, mobil saya kembali berjalan dengan lancar. Tidak ada lagi masalah pengiriman bahan bakar. Pelayanan yang sangat membantu',

        '3525010706950001',

        'JN8AZ1MW4BW678706'

    ),

    (

        'TS000005',

        '2023-11-06 12:30:00',

        '2023-11-06 20:00:00',

        'Mobil akan menjalani pemeliharaan komprehensif, termasuk pemeriksaan seluruh sistem. Ini termasuk penggantian damper yang aus, coil ignition yang bermasalah, serta pemeriksaan dan perawatan selang filter dan radiator racing. Semua suku cadang yang perlu diganti akan diperbaiki agar mobil berfungsi seperti semula.',

        'Pemeliharaan komprehensif yang telah dilakukan membuat mobil saya seperti baru. Semua masalah telah diperbaiki, dan saya merasa yakin dengan kualitas perbaikan yang diberikan. Terima kasih atas kerja kerasnya',

        '3225011201880002',

        '1HGCP26359A157554'

    );

INSERT INTO

    mekanik\_servis (mksv\_ts\_id, mksv\_mk\_id)

VALUES

    ('TS000001', 'MK0005'),

    ('TS000002', 'MK0003'),

    ('TS000002', 'MK0004'),

    ('TS000003', 'MK0005'),

    ('TS000004', 'MK0003'),

    ('TS000005', 'MK0001'),

    ('TS000005', 'MK0005'),

    ('TS000005', 'MK0004');

INSERT INTO

    suku\_cadang\_servis (scsv\_ts\_id, scsv\_sc\_id)

VALUES

    ('TS000001', 'SC00001'),

    ('TS000001', 'SC00004'),

    ('TS000002', 'SC00002'),

    ('TS000003', 'SC00005'),

    ('TS000004', 'SC00003'),

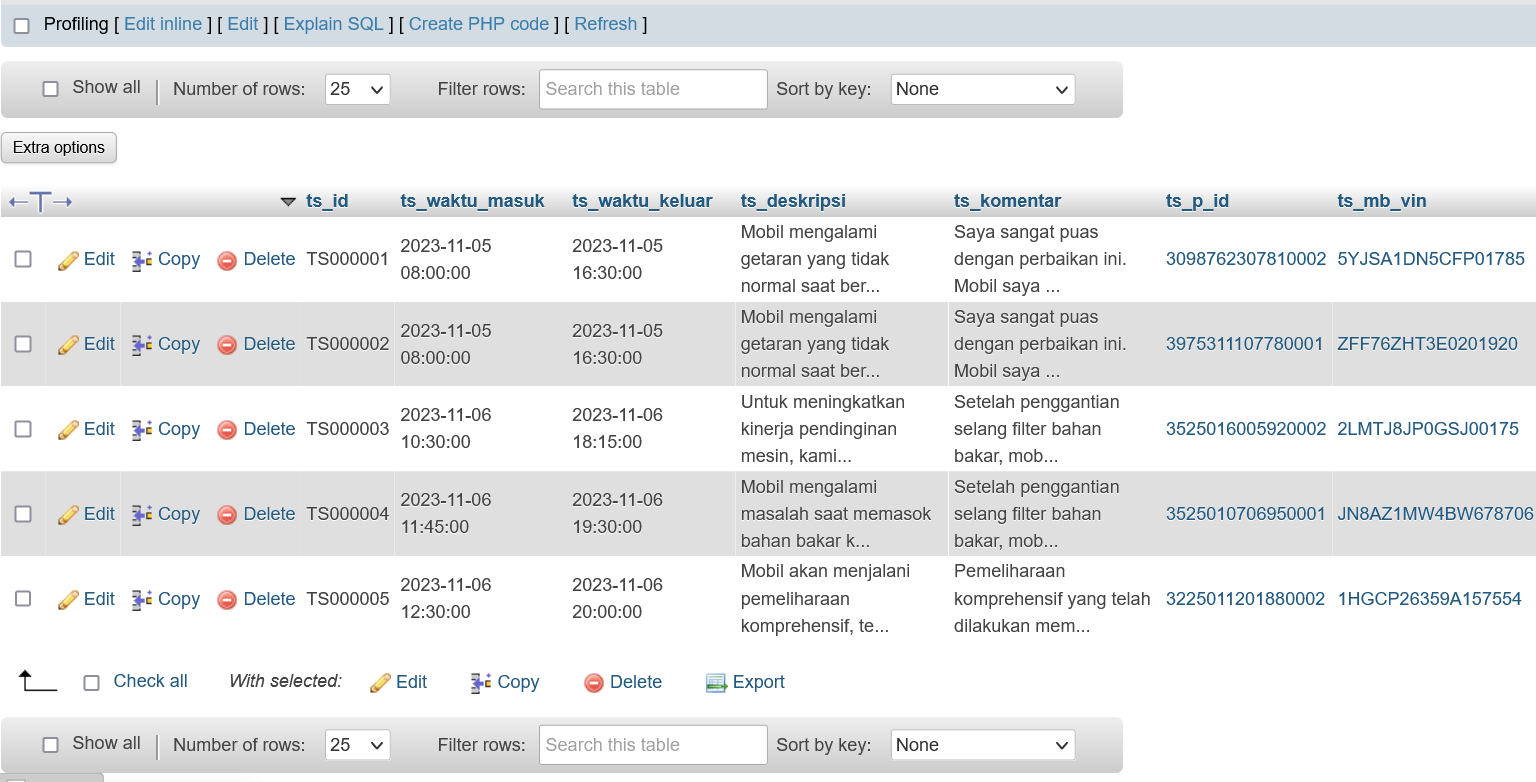
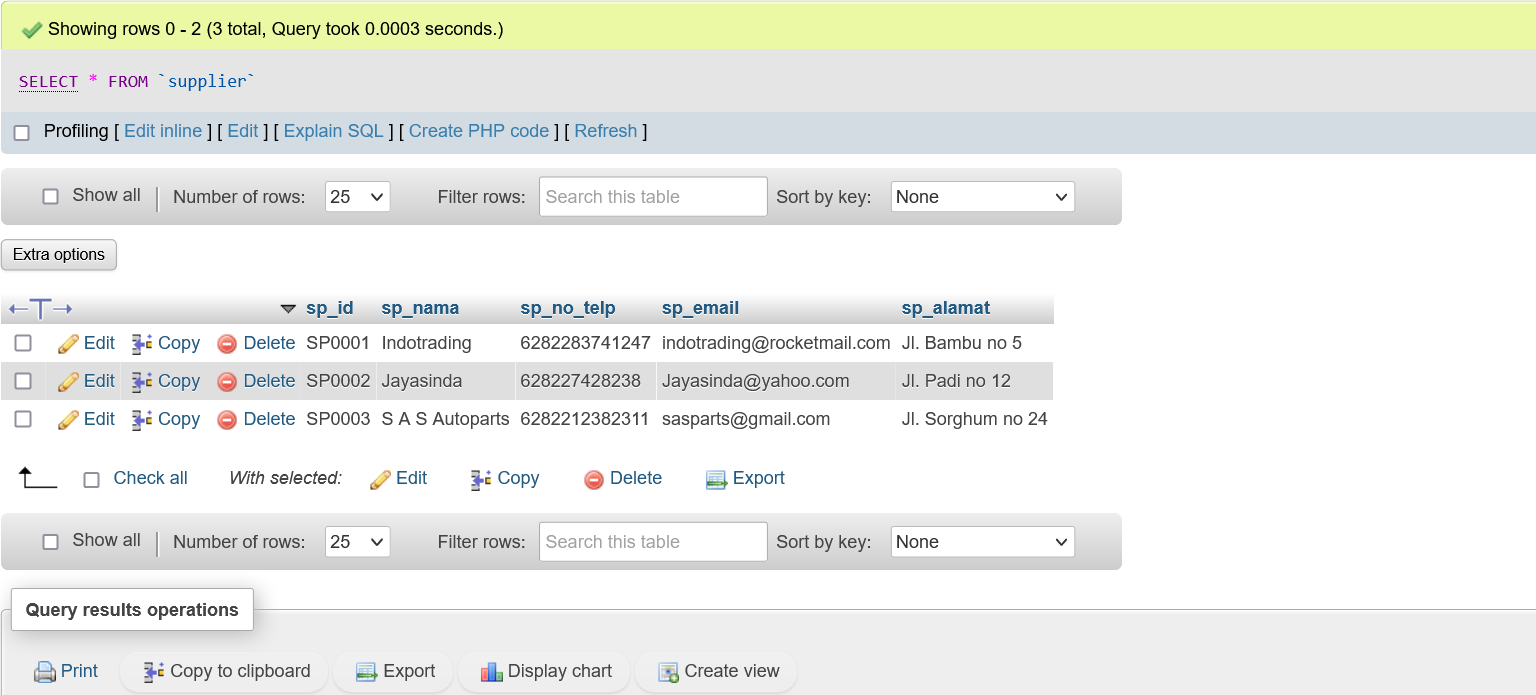
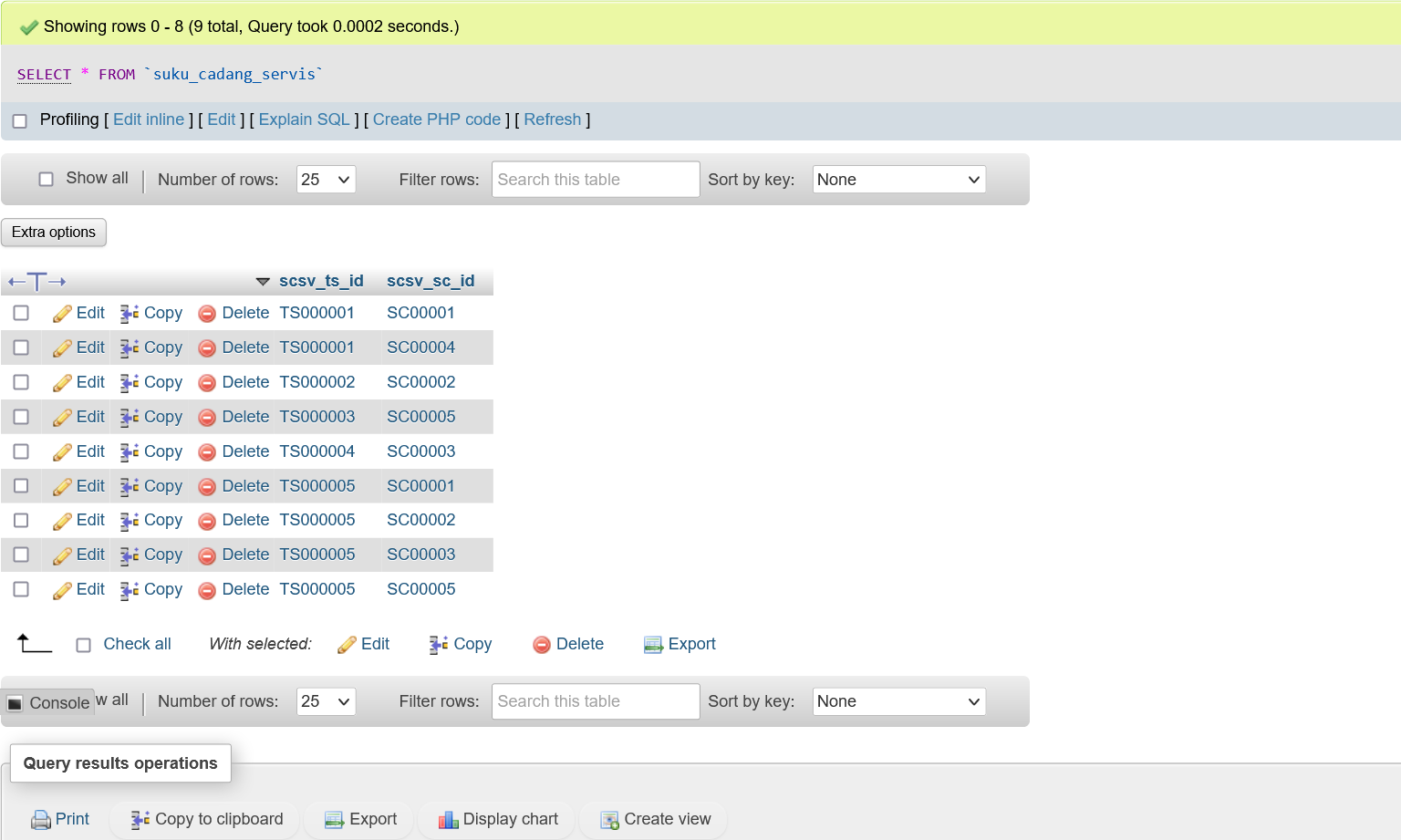
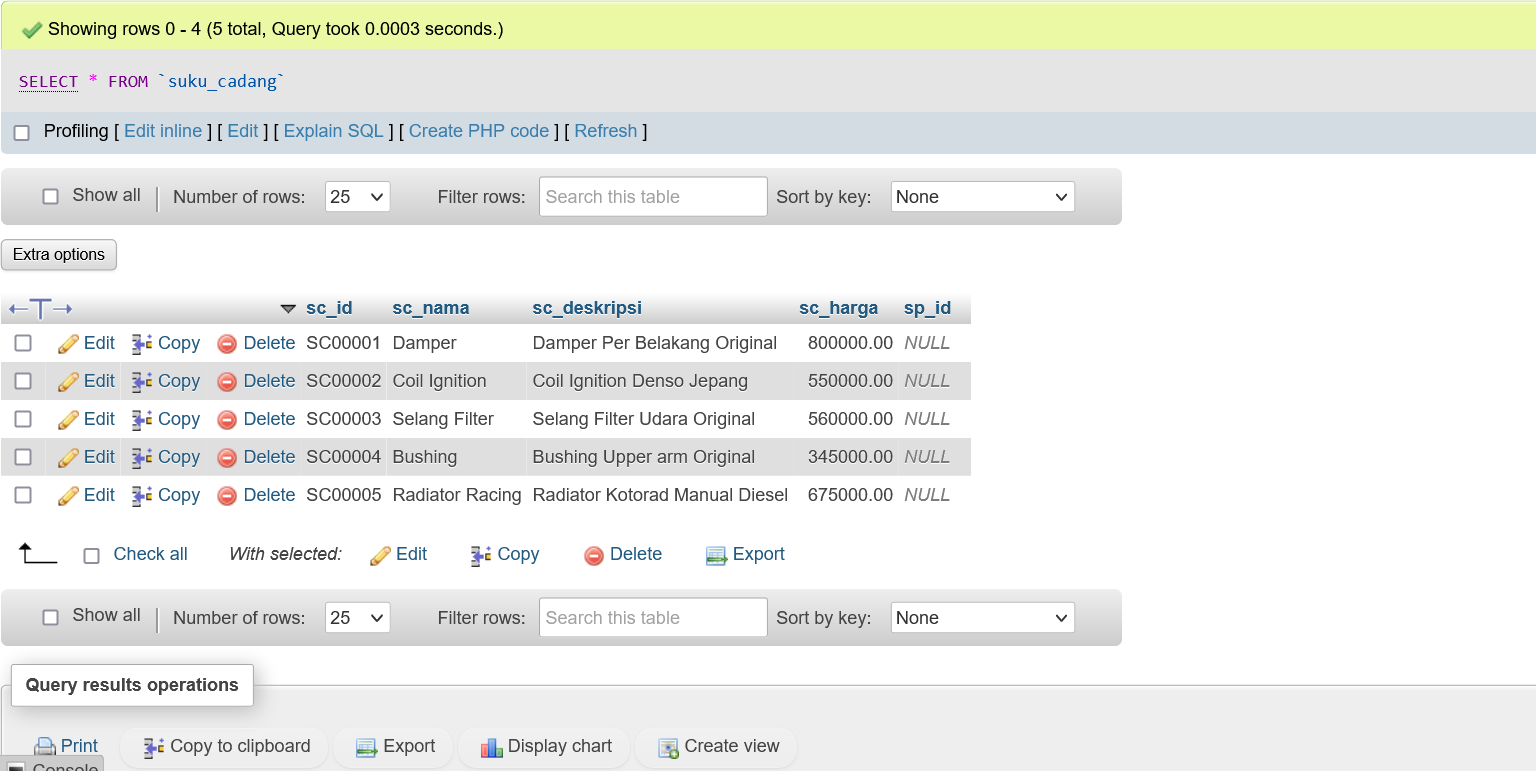
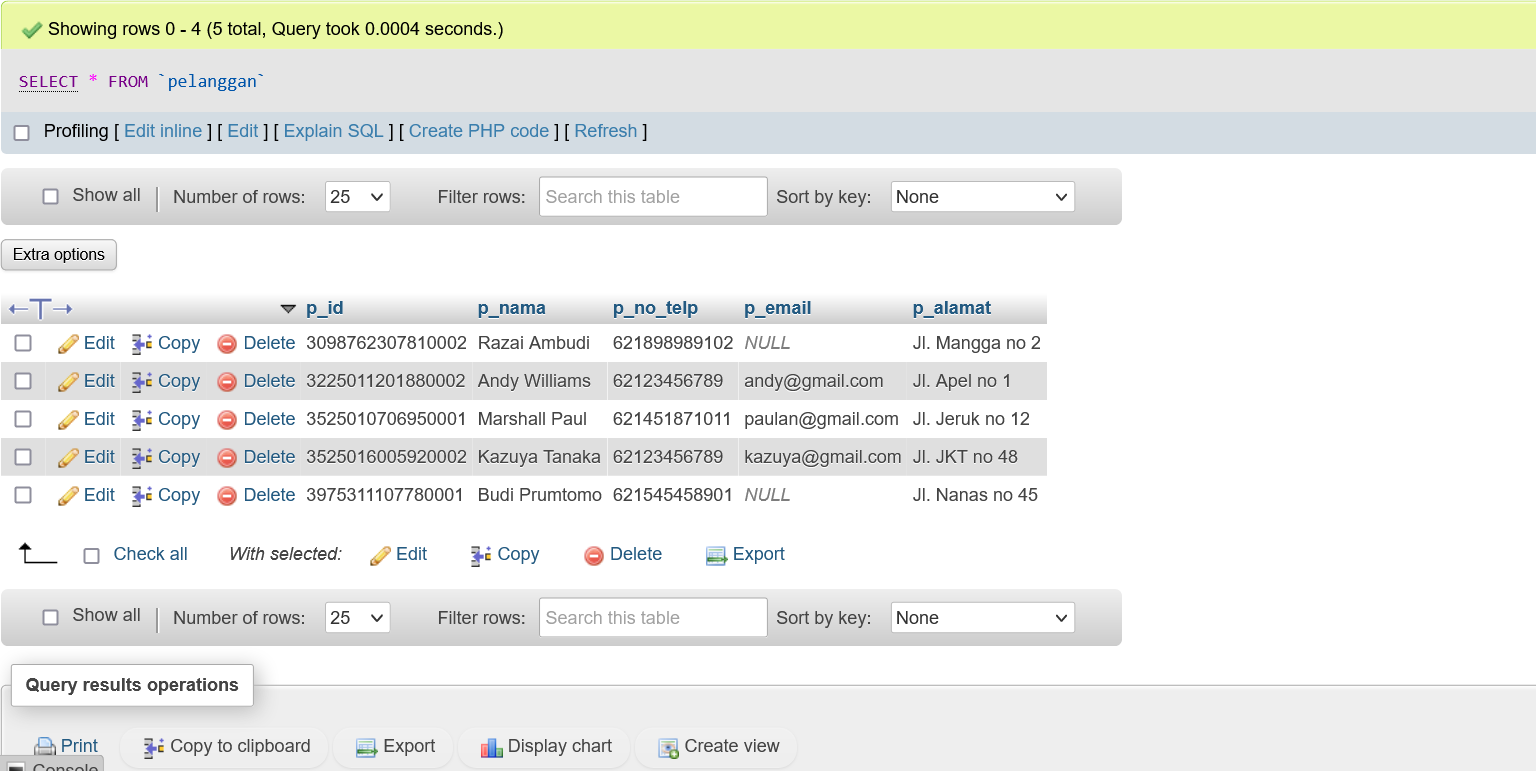
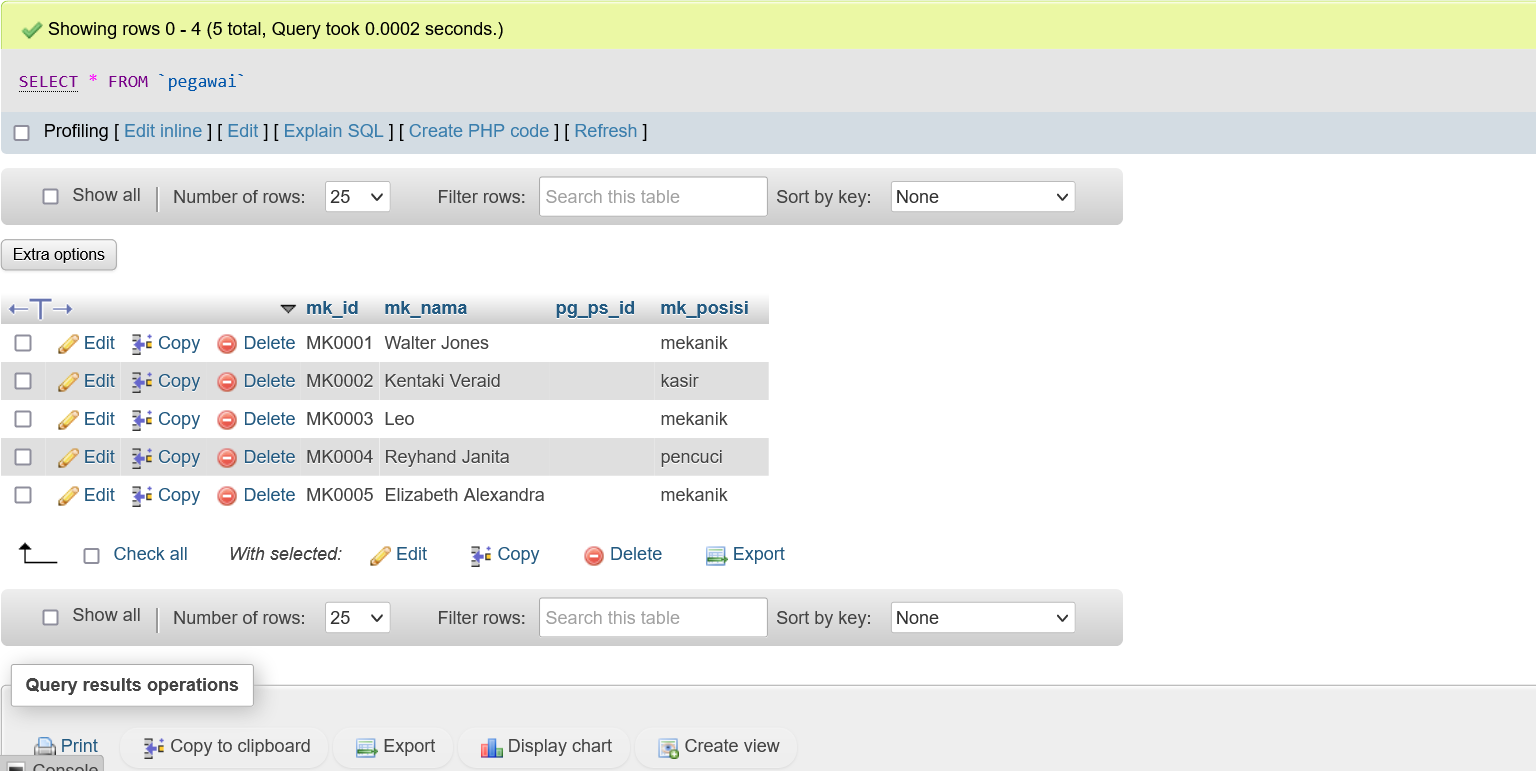
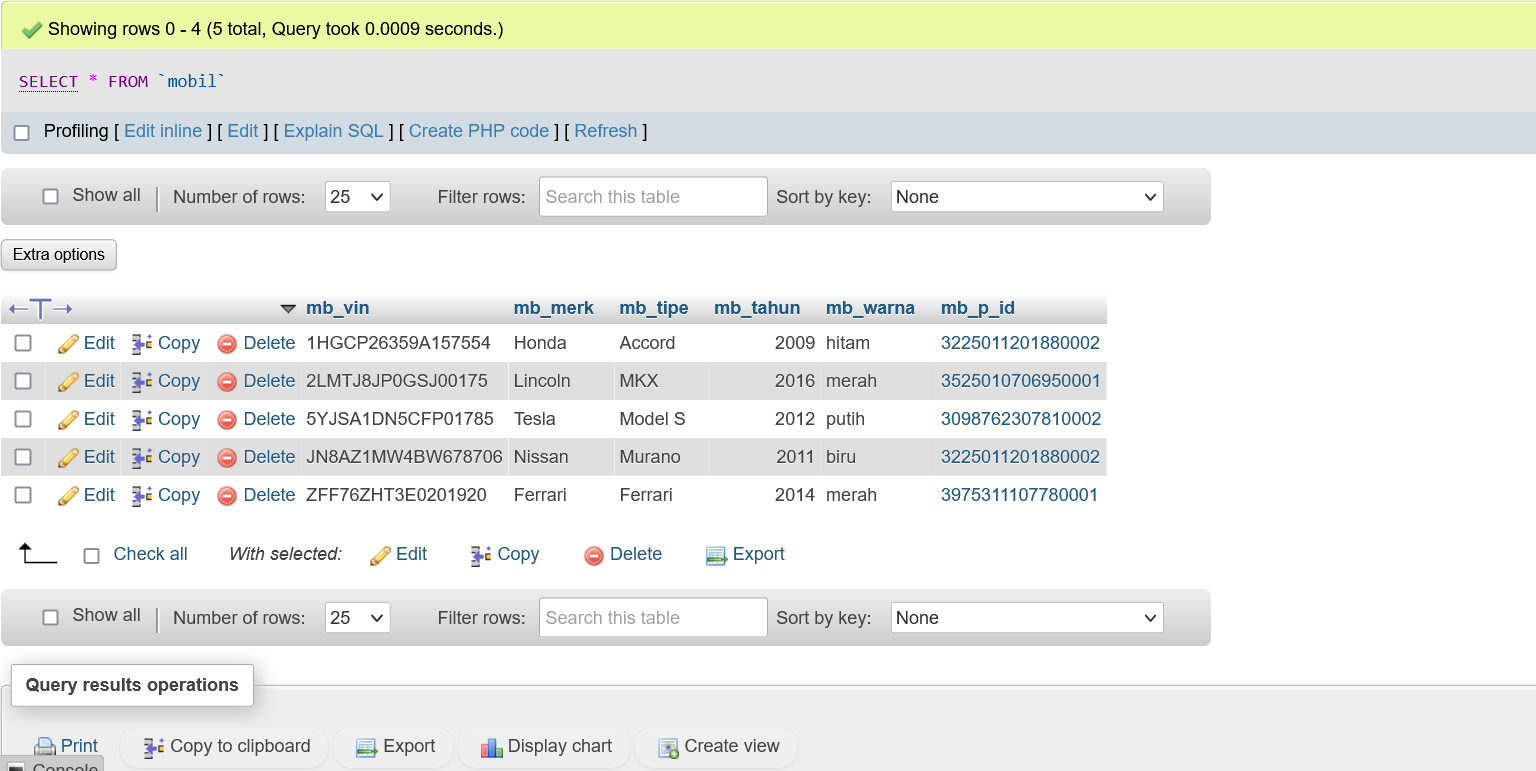
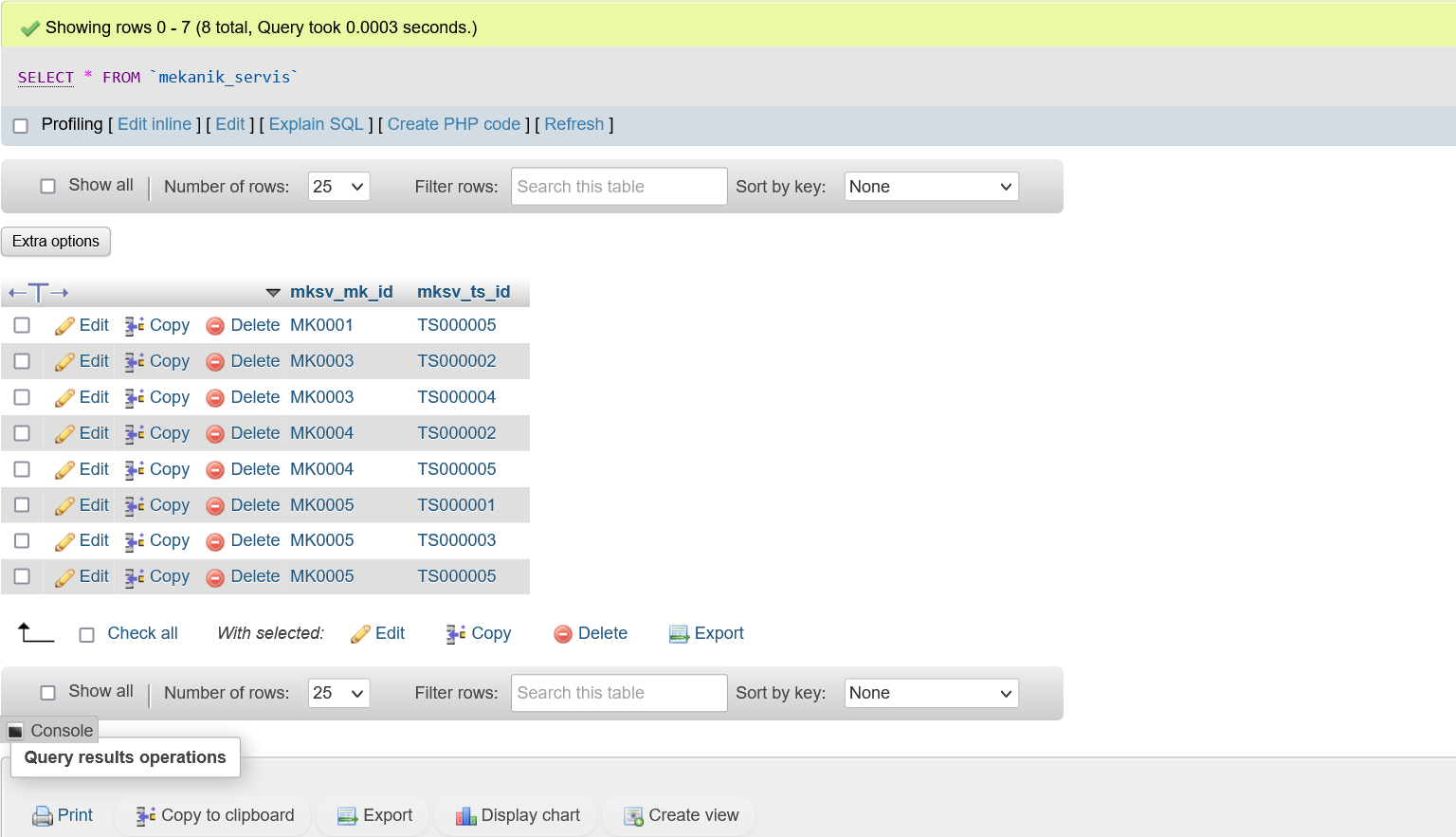
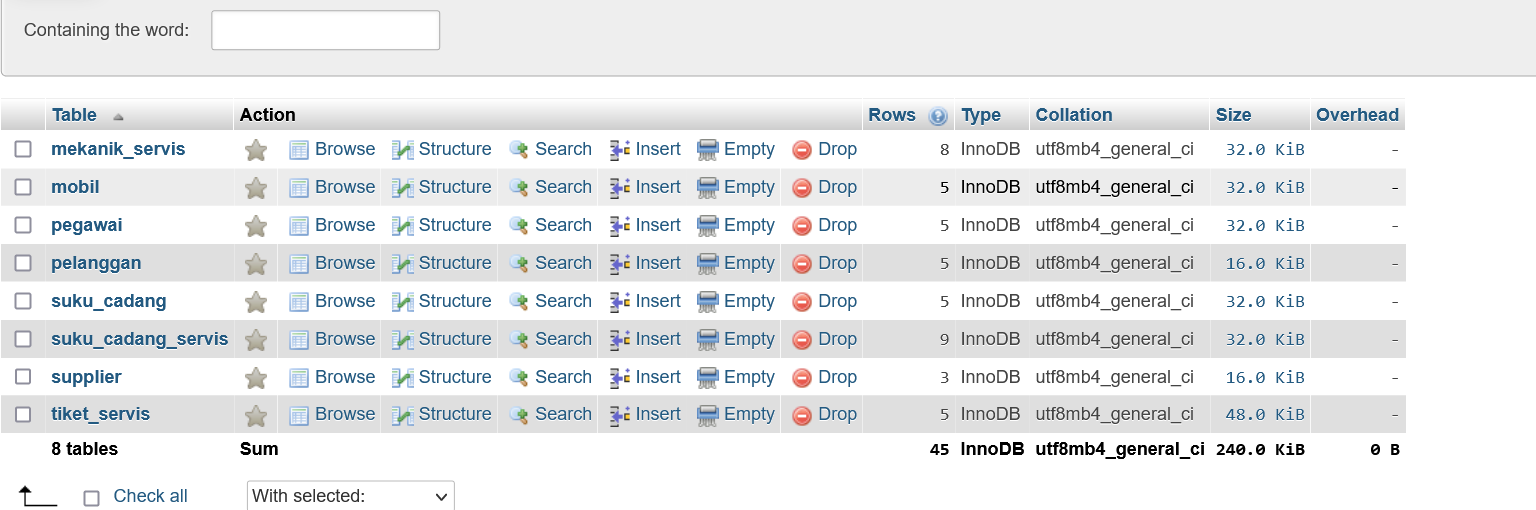
    ('TS000005', 'SC00001'),

    ('TS000005', 'SC00002'),

    ('TS000005', 'SC00003'),

    ('TS000005', 'SC00005');

Hasil:



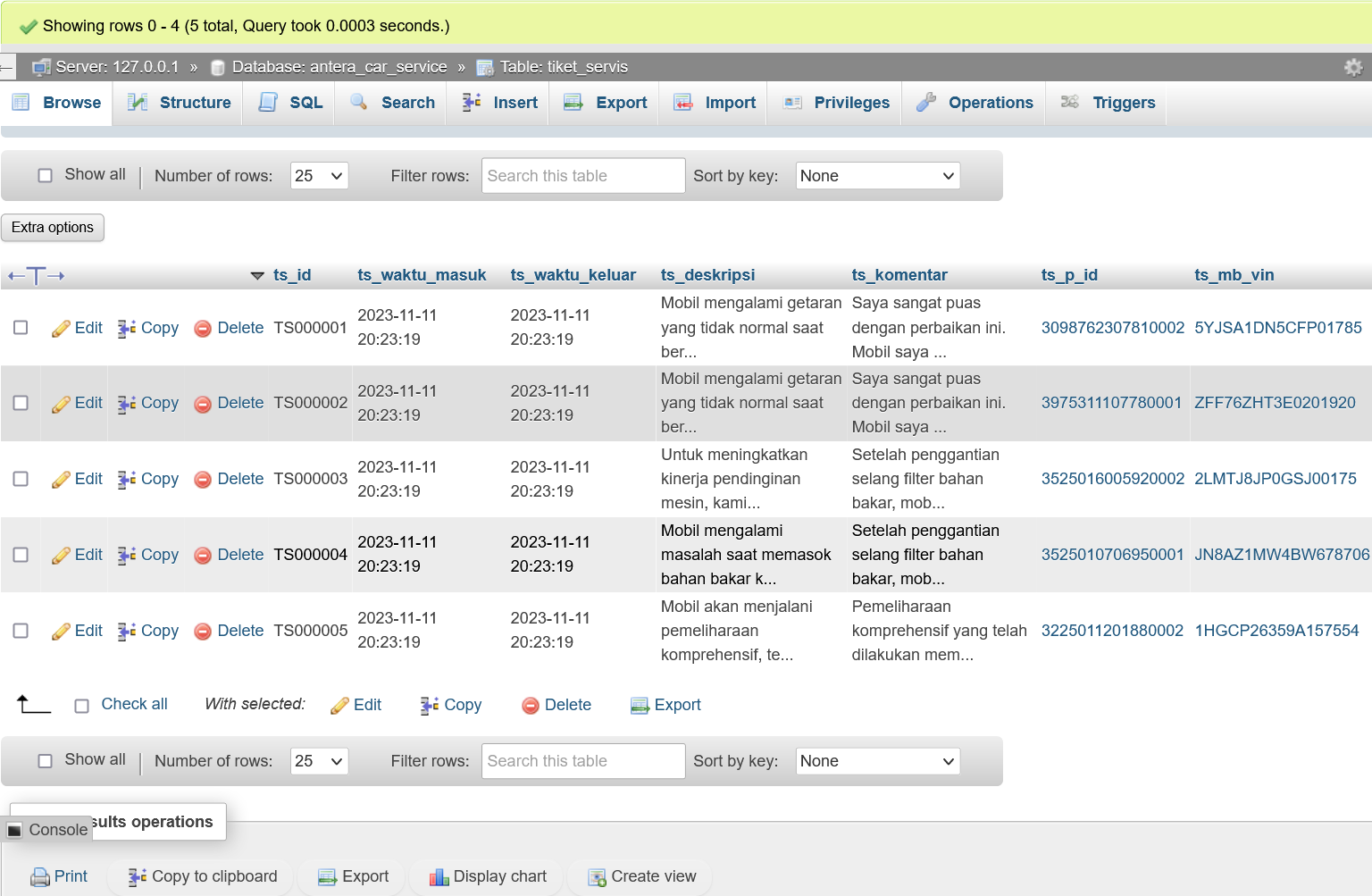
**Nomor 6**

Sintaks:

UPDATE tiket\_servis

SET ts\_waktu\_keluar = NOW();

Hasil:



**Nomor 7**

Sintaks:

UPDATE pelanggan

SET

    p\_nama = 'Andi Williams',

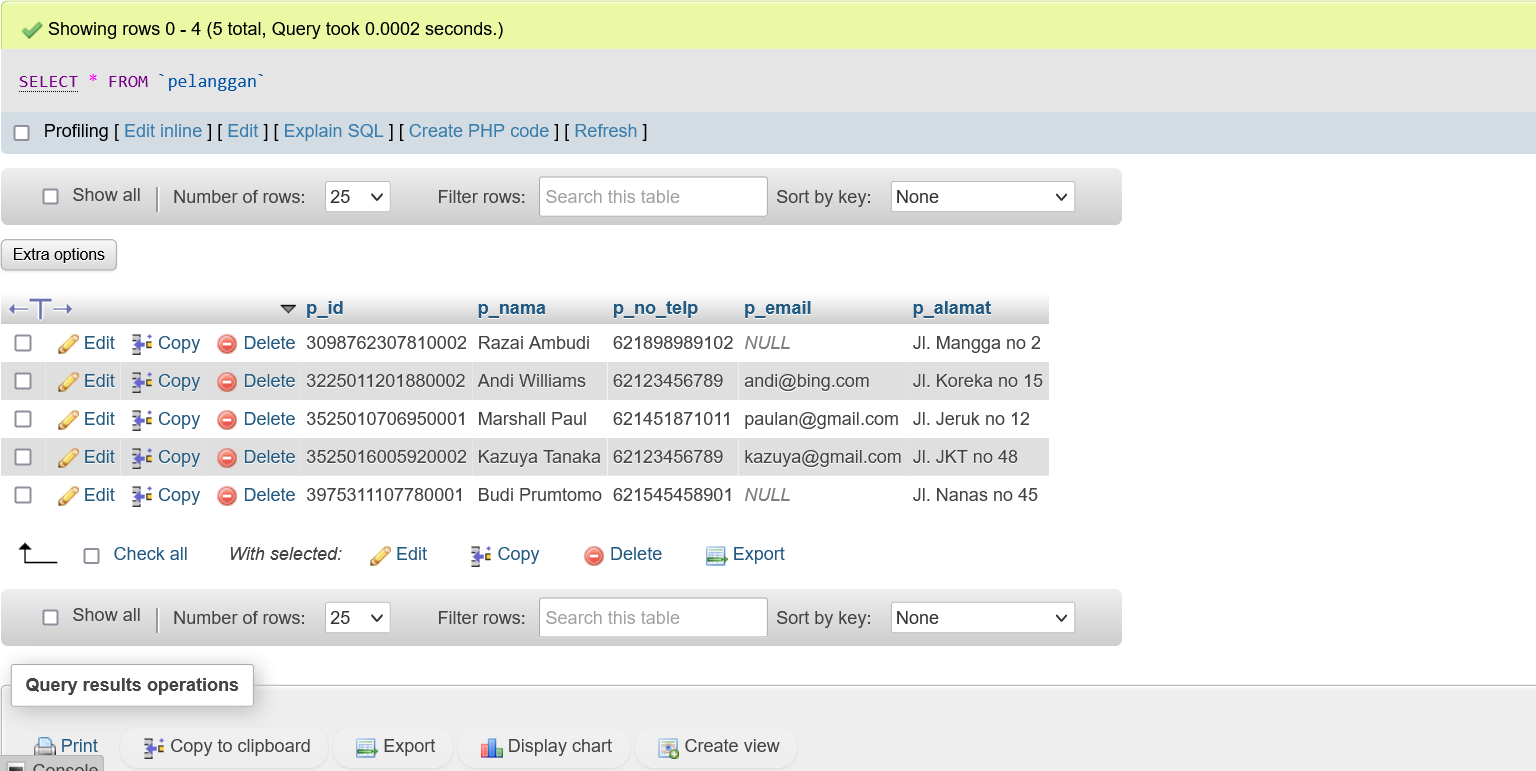
    p\_email = 'andi@bing.com',

    p\_alamat = 'Jl. Koreka no 15'

WHERE

    p\_id = '3225011201880002';

Hasil:



**Nomor 8**

Sintaks:

ALTER TABLE suku\_cadang

ADD COLUMN sp\_id CHAR(6),

ADD CONSTRAINT suku\_cadang\_supplier\_FK FOREIGN KEY (sp\_id) REFERENCES supplier(sp\_id);

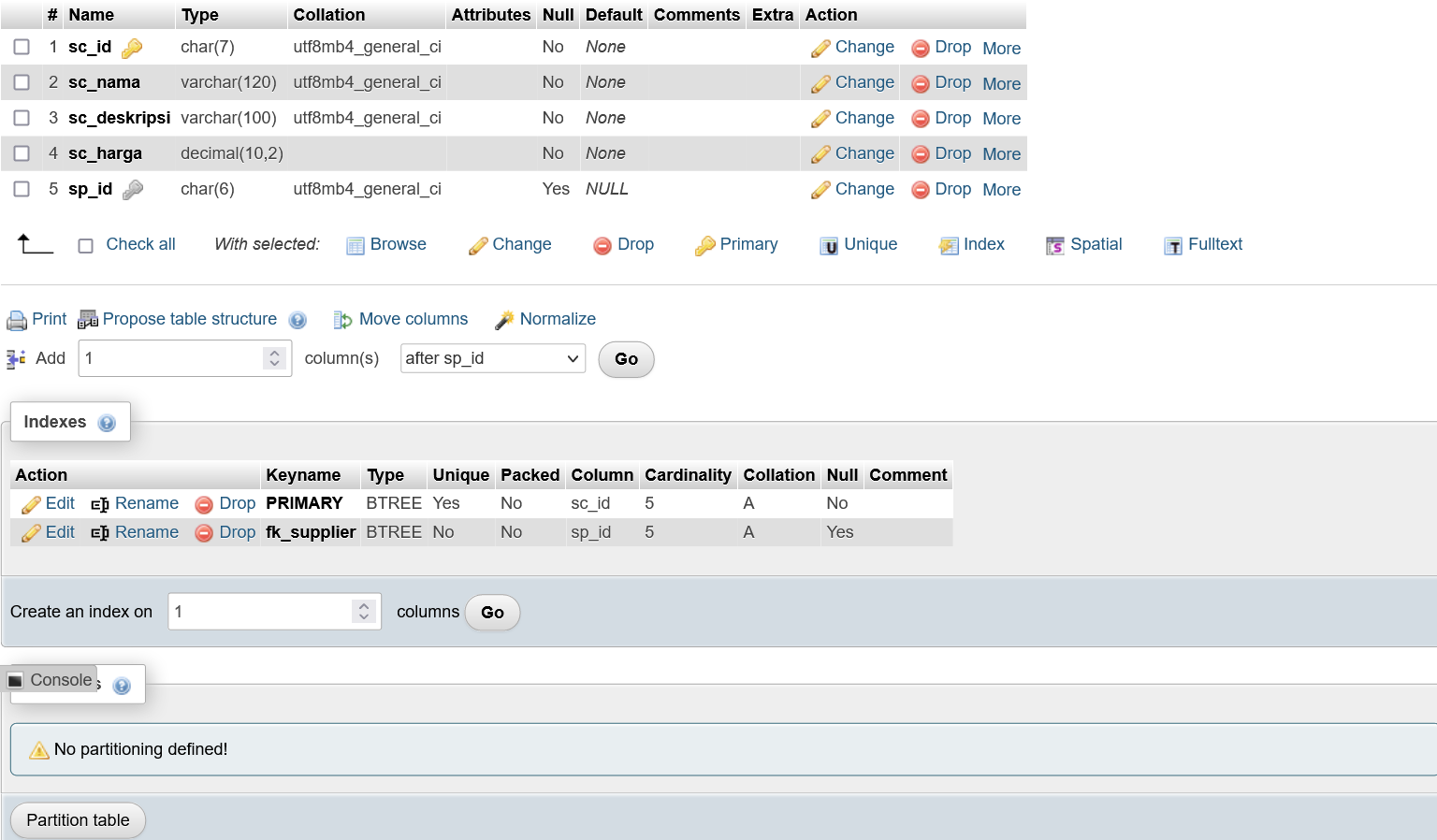
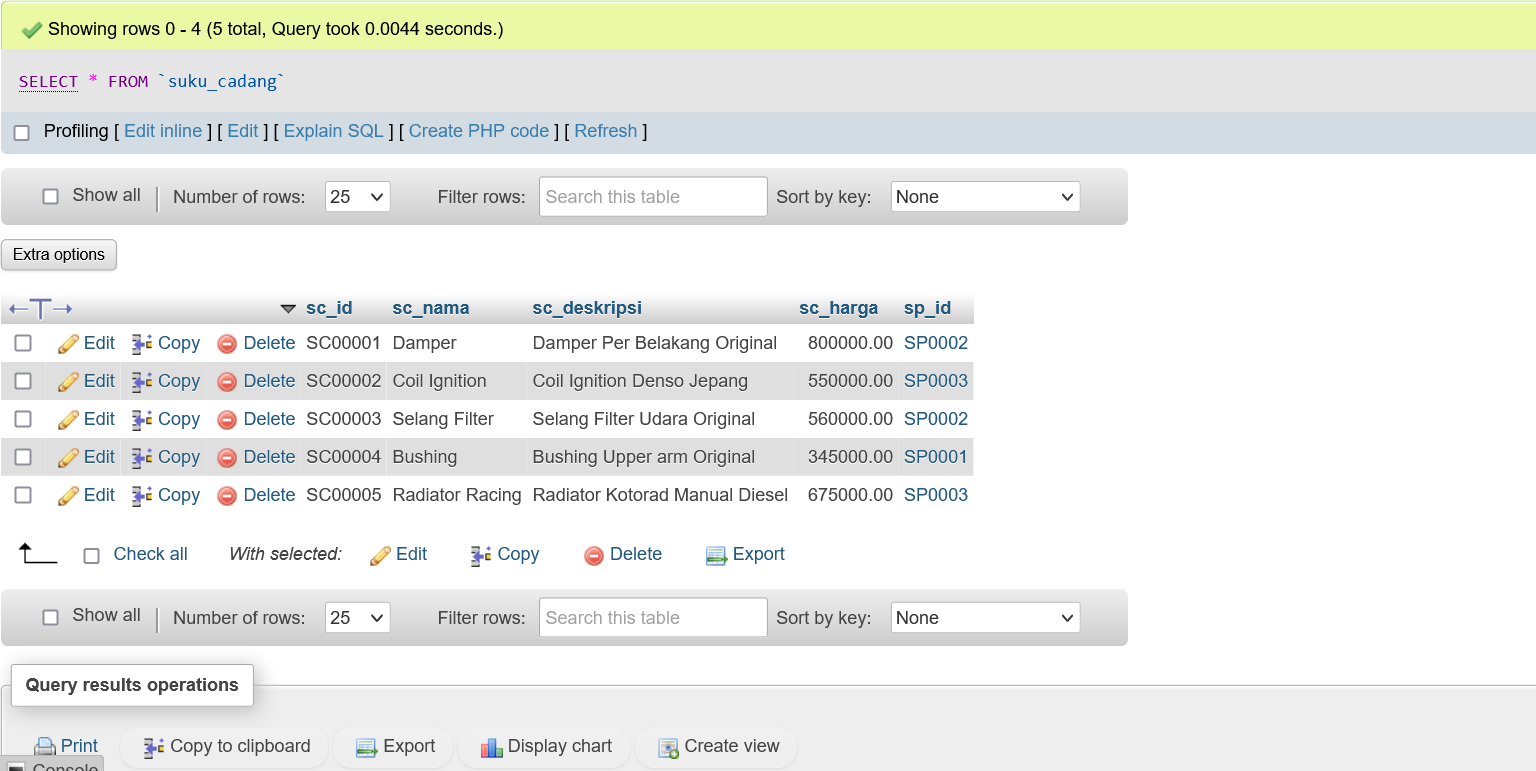
UPDATE suku\_cadang SET sp\_id = 'SP0001' WHERE sc\_id = 'SC00004';

UPDATE suku\_cadang SET sp\_id = 'SP0002' WHERE sc\_id IN ('SC00001', 'SC00003');

UPDATE suku\_cadang SET sp\_id = 'SP0003' WHERE sc\_id IN ('SC00002', 'SC00005');

ALTER TABLE suku\_cadang MODIFY sp\_id CHAR(6) NOT NULL;

Hasil:



**Nomor 9**

Sintaks:

UPDATE suku\_cadang

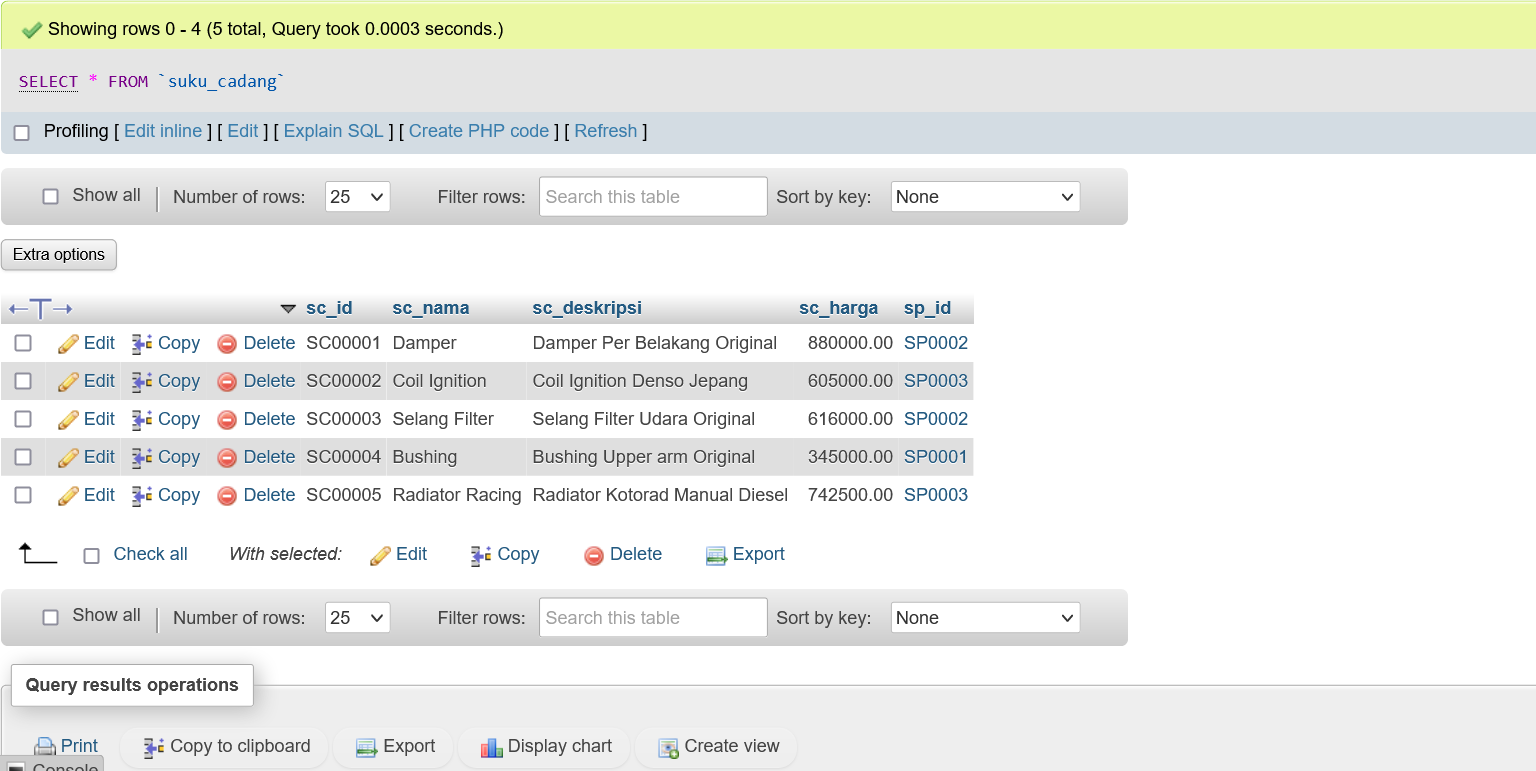
SET

    sc\_harga = sc\_harga \* 1.1

WHERE

    sc\_harga > 500000;

Hasil:



**Nomor 10**

Sintaks:

INSERT INTO

    tiket\_servis (

        ts\_id,

        ts\_p\_id,

        ts\_mb\_vin,

        ts\_waktu\_masuk,

        ts\_deskripsi

    )

VALUES

    (

        'TS000006',

        '3225011201880002',

        '2LMTJ8JP0GSJ00175',

        '2023-11-10 09:05:00',

        'Mobil mengalami kerusakan damper belakang. Terdapat kebocoran cairan hidrolik dan kondisi damper sudah aus. Kami akan mengganti damper belakang'

    );

INSERT INTO

    mekanik\_servis (mksv\_ts\_id, mksv\_mk\_id)

VALUES

    ('TS000006', 'MK0001');

INSERT INTO

    suku\_cadang\_servis (scsv\_ts\_id, scsv\_sc\_id)

VALUES

    ('TS000006', 'SC00001');

Hasil:



**Nomor 11**

Sintaks:

UPDATE tiket\_servis

SET ts\_waktu\_keluar = NOW()

WHERE ts\_id = 'TS000006';

UPDATE tiket\_servis

SET ts\_komentar = 'Found a small scratch on the car. Less satisfactory service.'

WHERE ts\_id = 'TS000006';

DELETE FROM mekanik\_servis

WHERE

    mksv\_mk\_id = (

        SELECT

            mk\_id

        FROM

            pegawai

        WHERE

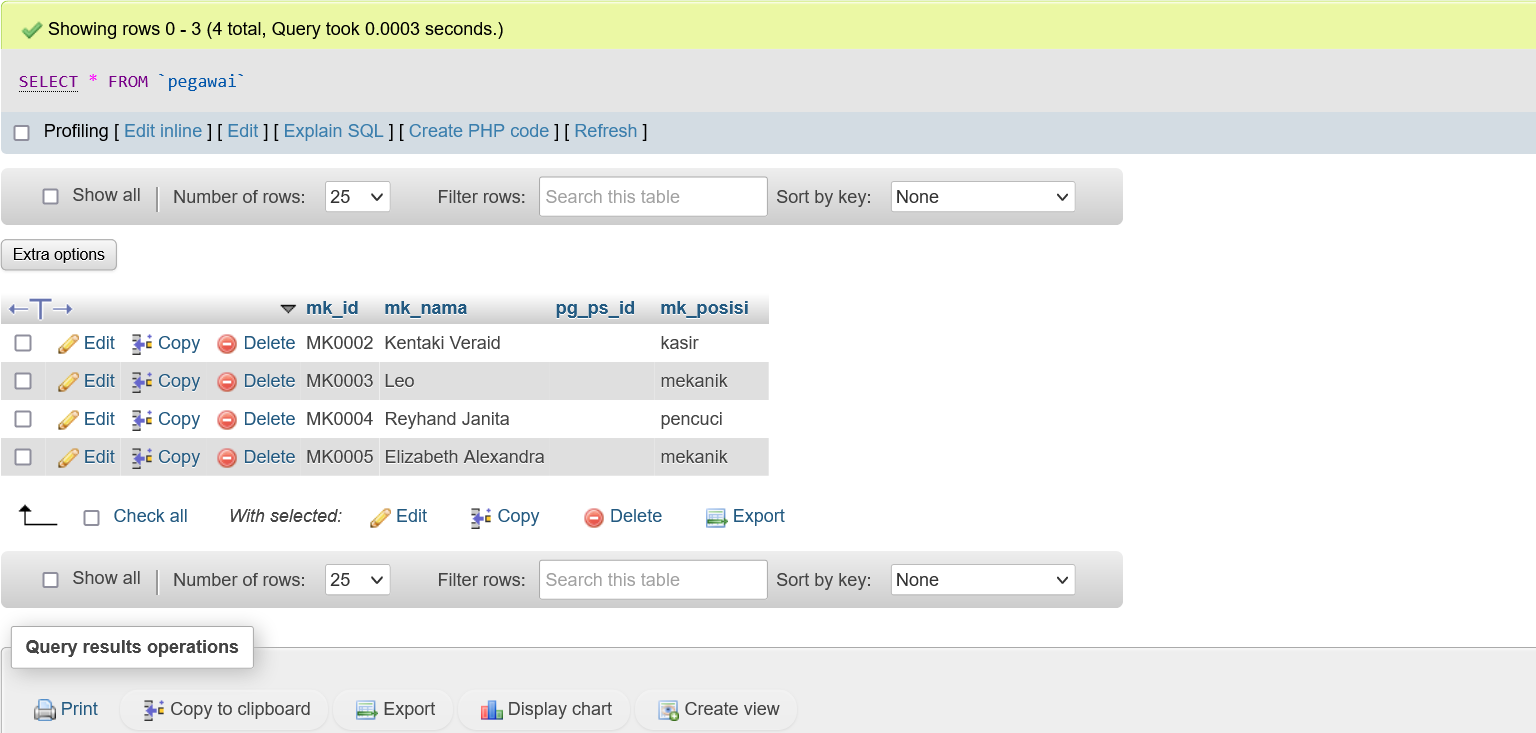
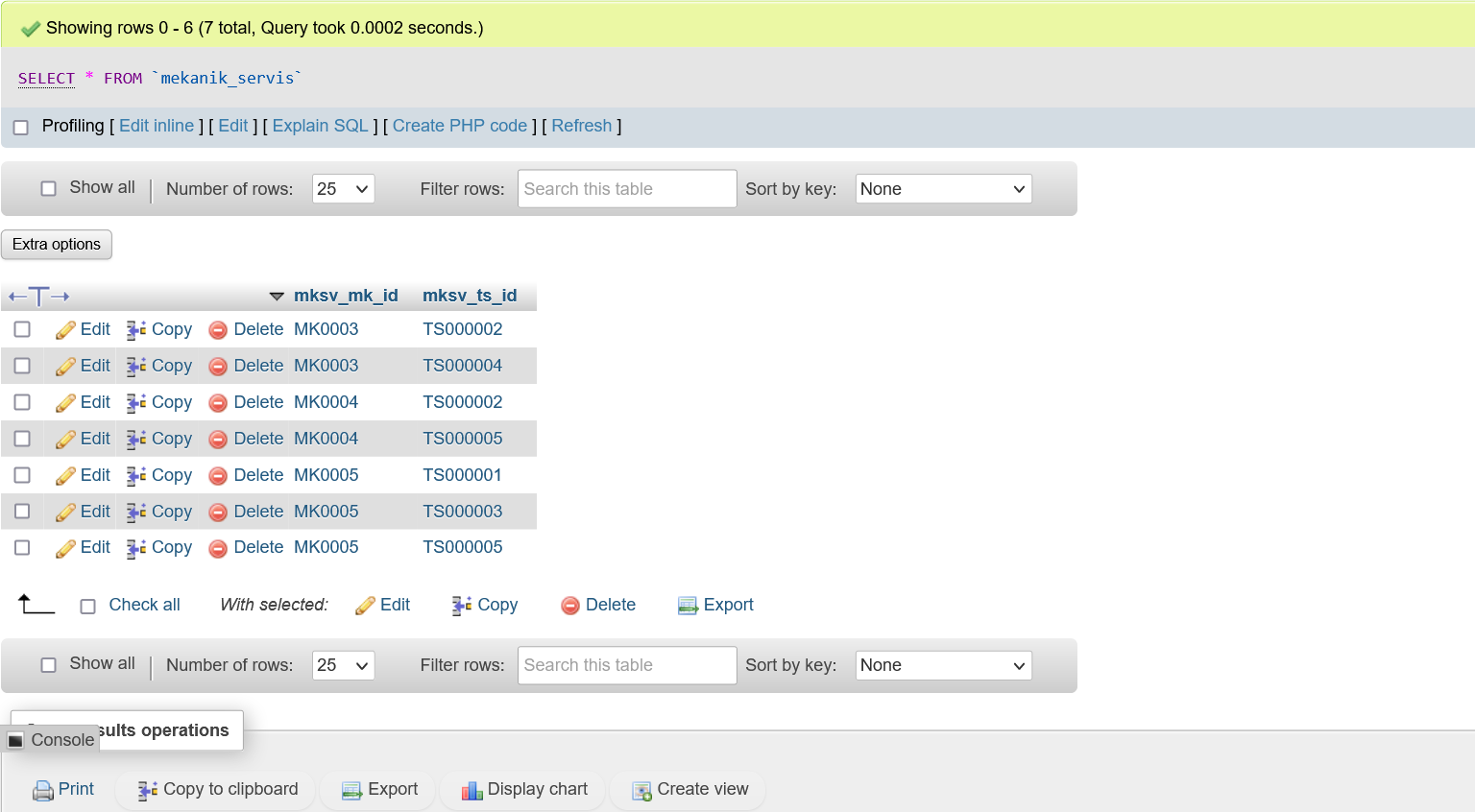
            mk\_nama = 'Walter Jones'

    );

DELETE FROM pegawai

WHERE mk\_nama = 'Walter Jones';

Hasil:

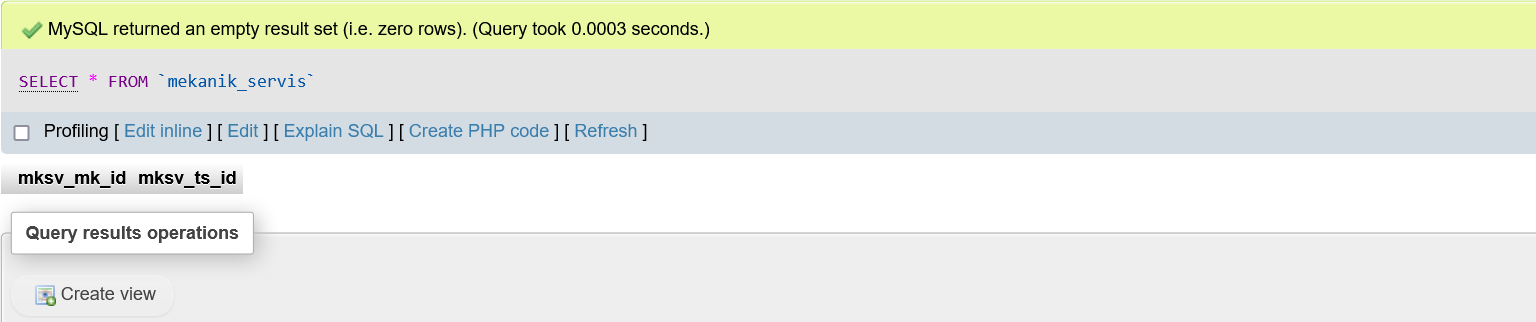


**Nomor 12**

Sintaks:

DELETE FROM mekanik\_servis;

Hasil:

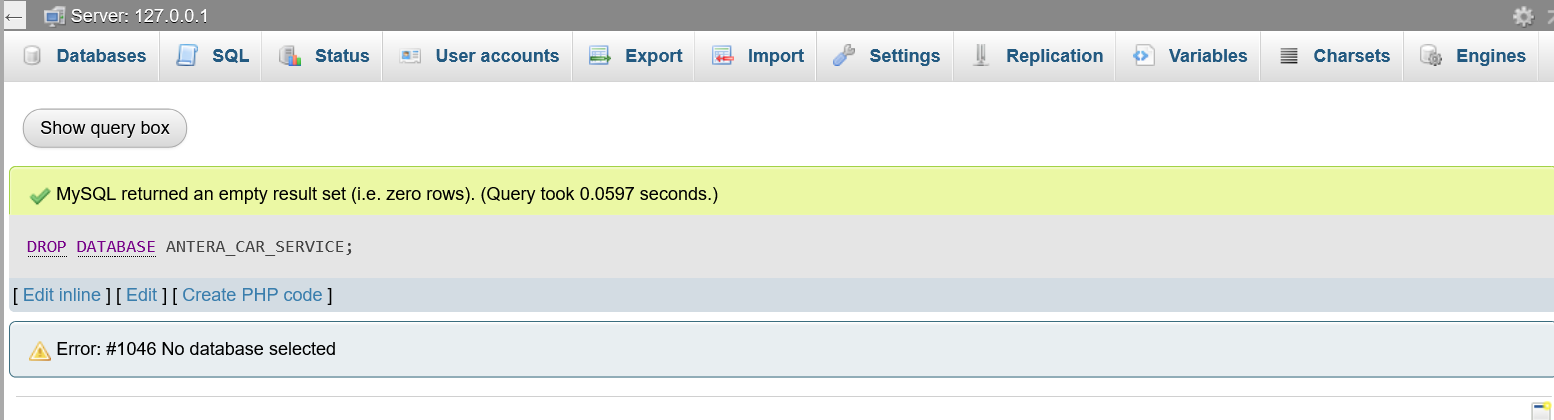


Bonus 😊

Sintaks:

DROP DATABASE ANTERA\_CAR\_SERVICE;

Hasil:



Canda Mbak Mas :’)