**LAPORAN**

**“Implementasi Trigger dan Store Procedure pada Kasus Kost Poetra Sultan”**

Diajukan untuk memenuhi salah satu praktikum Mata Kuliah Basis Data yang di ampu oleh:

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**PROGRAM STUDI INFORMATIKA**

**UNIVERSITAS AHMAD DAHLAN**

**FAKULTAS TEKNOLOGI INDUSTRI**

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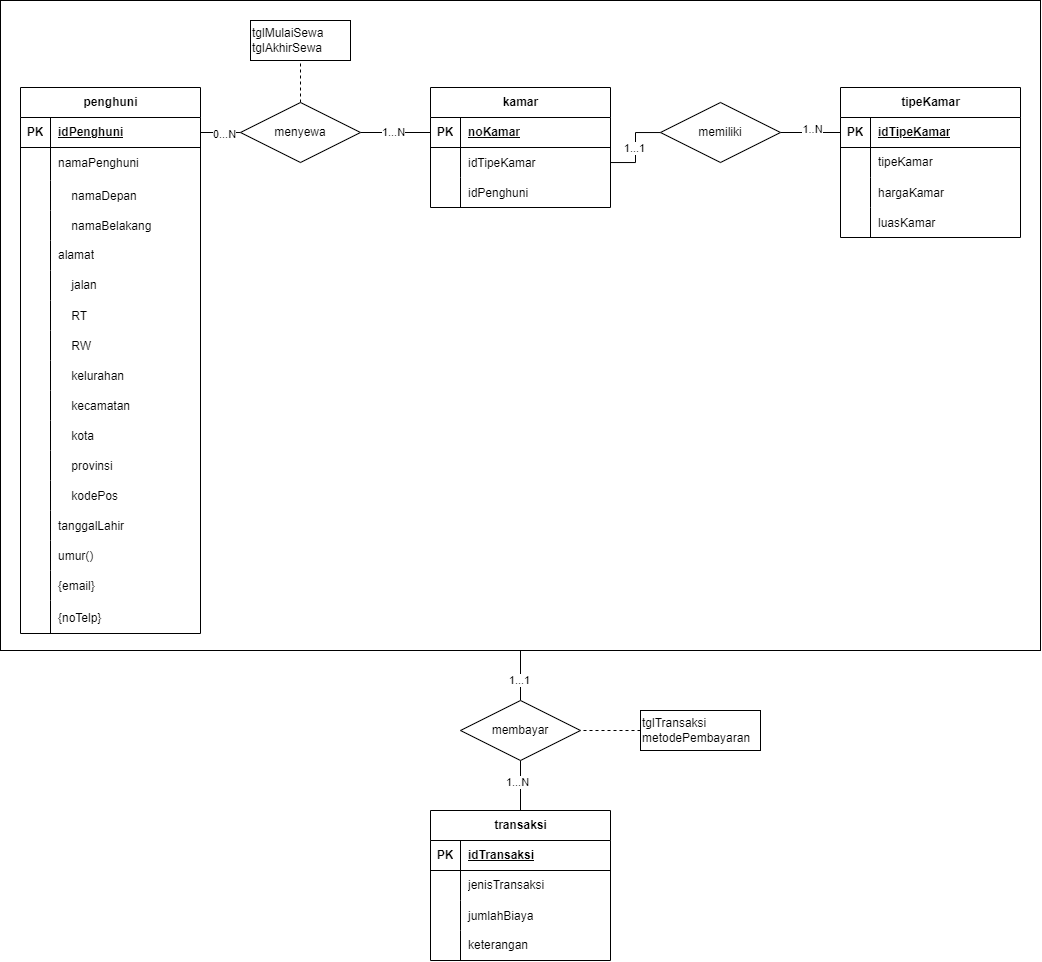
Proses bisnis pengelolaan rumah kost Poetra Sultan dimulai dengan penyebaran informasi mengenai ketersediaan unit kamar kepada calon penghuni. Calon penghuni akan melakukan pengecekan terhadap ketersediaan unit, dan menentukan tipe kamar yang diinginkan. Poetra Sultan menawarkan dua tipe kamar, yaitu standar tanpa kamar mandi dalam dan premium dengan fasilitas kamar mandi dalam.

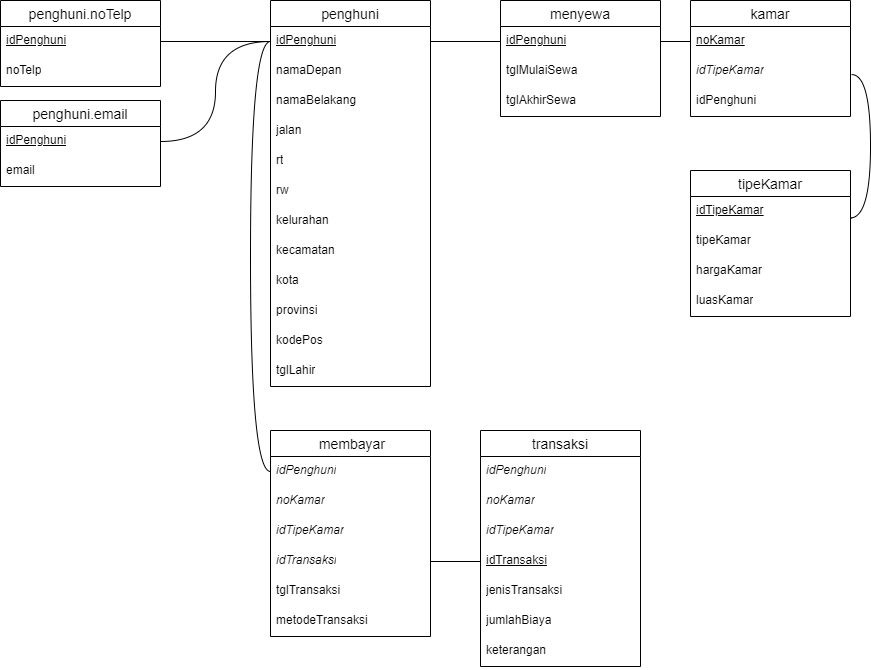
Setelah memutuskan untuk menyewa, calon penghuni akan menentukan durasi penyewaan minimal enam bulan atau satu semester akademik. Kemudian, mereka akan diperkenalkan dengan berbagai fasilitas yang disediakan oleh Poetra Sultan.

Selanjutnya, calon penghuni akan diminta untuk membuat akun di sistem manajemen rumah kost kami. Akun ini memungkinkan mereka untuk mengakses berbagai layanan seperti wifi, melihat durasi tinggal, melihat tagihan dan lainnya.

Penghuni diwajibkan membayar tagihan utilitas seperti listrik dan air tepat waktu. Jika terdapat ketidakpatuhan dalam pembayaran tagihan atau pelanggaran lainnya terhadap peraturan rumah kost, sanksi tertentu dapat diberikan hingga pemutusan kontrak penyewaan.

Proses bisnis ini berakhir ketika masa tinggal penghuni telah selesai dan proses check-out dilakukan.





**Tabel yang dihasilkan**

penghuni(idPenghuni,namaDepan, namaBelakang, jalan, RT, RW, kelurahan, kecamatan,kota,provinsi,kodePos,tanggalLahir)

penghuni.email(idPenghuni,email)

penghuni.noTelp(idPenghuni,noTelp)

menyewa(idPenghuni,tglMulaiSewa,tglAkhirSewa)

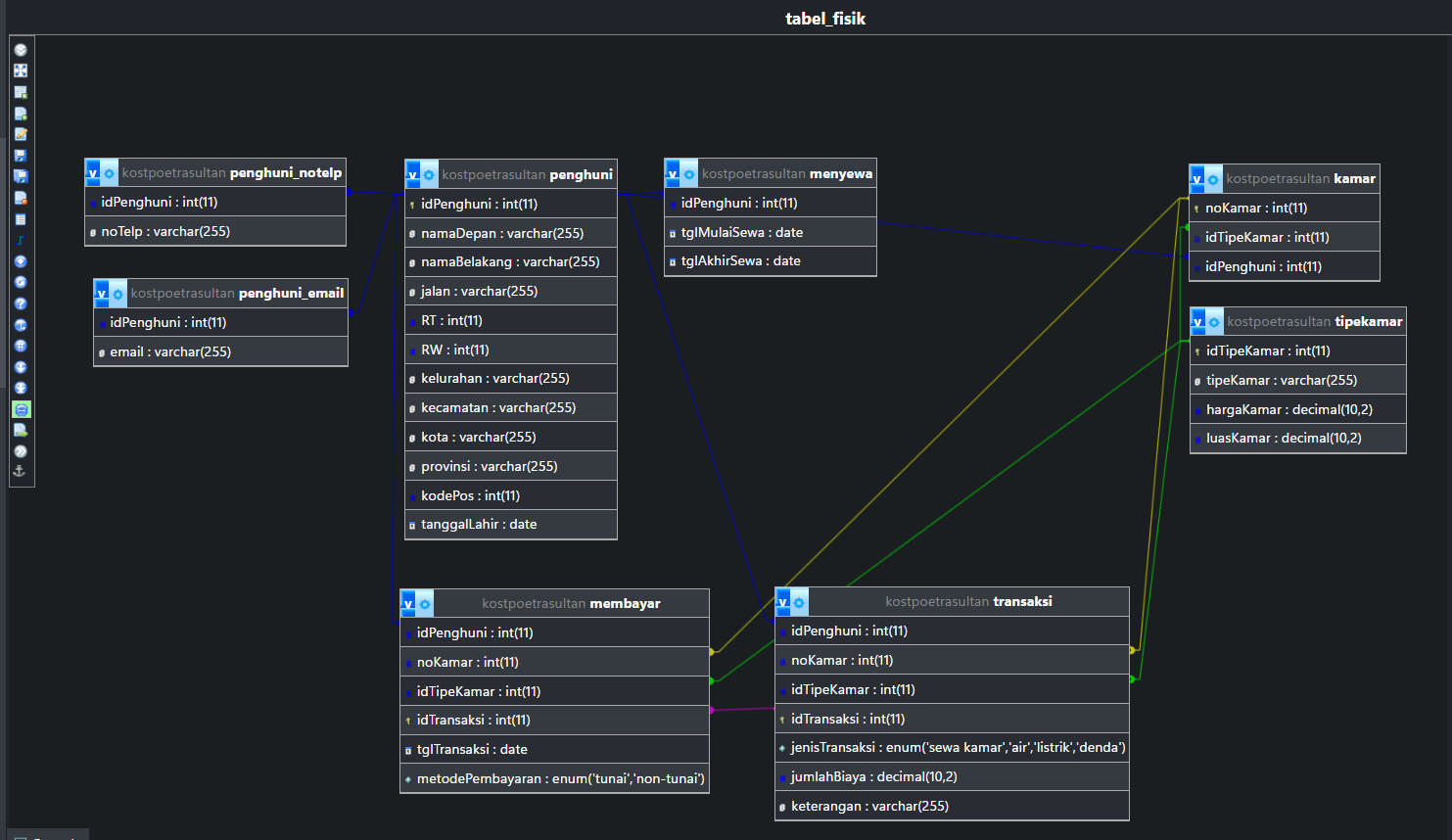
kamar(noKamar,*idTipeKamar*,idPenghuni)

tipeKamar(idTipeKamar,tipeKamar,hargaKamar,luasKamar)

membayar(*idPenghuni*,*noKamar*,*idTipeKamar*,*idTransaksi*,tglTransaksi,metodePembayaran)

transaksi(*idPenghuni*,*noKamar*,*idTipeKamar*,idTransaksi,jenisTransaksi,jumlahBiaya,tglPembayaran,keterangan)

Gambaran relasi tabel di PHPMYADMIN



Masuk ke dalam database

mysql -u root

|  |
| --- |
| ireddragonicy@NDIK-PC c:\xampp  # mysql -u root  Welcome to the MariaDB monitor. Commands end with ; or \g.  Your MariaDB connection id is 17  Server version: 10.4.32-MariaDB mariadb.org binary distribution  Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.  Type 'help;' or '\h' for help. Type '\c' to clear the current input statement. |

Jika sudah ada databasenya bisa menghapus

|  |
| --- |
| DROP DATABASE kostpoetrasultan; |

Output

|  |
| --- |
| MariaDB [(none)]> DROP DATABASE kostpoetrasultan;  Query OK, 8 rows affected (0.038 sec) |

membuat database dan menggunakan database tersebut

|  |
| --- |
| CREATE DATABASE kostpoetrasultan;  USE kostpoetrasultan |

|  |
| --- |
| MariaDB [(none)]> CREATE DATABASE kostpoetrasultan;  Query OK, 1 row affected (0.002 sec)  MariaDB [(none)]> USE kostpoetrasultan  Database changed |

Melihat apakah database sudah terbuat atau belum

|  |
| --- |
| MariaDB [kostpoetrasultan]> SHOW DATABASES;  +--------------------+  | Database |  +--------------------+  | information\_schema |  | kostpoetrasultan |  | mysql |  | performance\_schema |  | phpmyadmin |  | test |  +--------------------+  6 rows in set (0.001 sec) |

Menerapkan ke dalam MySQL, ada beberapa sedikit revisi apabila sudah dihapus maka akan dibuat NULL agar bisa digunakan lagi

|  |
| --- |
| CREATE TABLE penghuni (  idPenghuni INT PRIMARY KEY AUTO\_INCREMENT,  namaDepan VARCHAR(255),  namaBelakang VARCHAR(255),  jalan VARCHAR(255),  RT INT,  RW INT,  kelurahan VARCHAR(255),  kecamatan VARCHAR(255),  kota VARCHAR(255),  provinsi VARCHAR(255),  kodePos INT,  tanggalLahir DATE  );  CREATE TABLE penghuni\_email (  idPenghuni INT,  email VARCHAR(255),  FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE CASCADE  );  CREATE TABLE penghuni\_noTelp (  idPenghuni INT,  noTelp VARCHAR(255),  FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE CASCADE  );  CREATE TABLE menyewa (  idPenghuni INT,  tglMulaiSewa DATE,  tglAkhirSewa DATE,  FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET CASCADE  );  CREATE TABLE tipeKamar (  idTipeKamar INT PRIMARY KEY AUTO\_INCREMENT,  tipeKamar VARCHAR(255),  hargaKamar DECIMAL(10,2),  luasKamar DECIMAL(10,2)  );  CREATE TABLE kamar (  noKamar INT PRIMARY KEY AUTO\_INCREMENT,  idTipeKamar INT,  idPenghuni INT,  FOREIGN KEY (idTipeKamar) REFERENCES tipeKamar(idTipeKamar) ON DELETE SET NULL,  FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET NULL  );  CREATE TABLE transaksi (  idPenghuni INT,  noKamar INT,  idTipeKamar INT,  idTransaksi INT PRIMARY KEY AUTO\_INCREMENT,  jenisTransaksi ENUM('sewa kamar', 'air', 'listrik', 'denda'),  jumlahBiaya DECIMAL(10,2),  keterangan VARCHAR(255),  FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET NULL,  FOREIGN KEY (noKamar) REFERENCES kamar(noKamar) ON DELETE SET NULL,  FOREIGN KEY (idTipeKamar) REFERENCES tipeKamar(idTipeKamar)  );  CREATE TABLE membayar (  idPenghuni INT,  noKamar INT,  idTipeKamar INT,  idTransaksi INT PRIMARY KEY AUTO\_INCREMENT,  tglTransaksi DATE,  metodePembayaran ENUM('tunai', 'non-tunai'),  FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET NULL,  FOREIGN KEY (noKamar) REFERENCES kamar(noKamar) ON DELETE SET NULL,  FOREIGN KEY (idTipeKamar) REFERENCES tipeKamar(idTipeKamar) ON DELETE SET NULL,  FOREIGN KEY (idTransaksi) REFERENCES transaksi(idTransaksi)  ); |

output

|  |
| --- |
| MariaDB [kostpoetrasultan]> CREATE TABLE penghuni (  -> idPenghuni INT PRIMARY KEY AUTO\_INCREMENT,  -> namaDepan VARCHAR(255),  -> namaBelakang VARCHAR(255),  -> jalan VARCHAR(255),  -> RT INT,  -> RW INT,  -> kelurahan VARCHAR(255),  -> kecamatan VARCHAR(255),  -> kota VARCHAR(255),  -> provinsi VARCHAR(255),  -> kodePos INT,  -> tanggalLahir DATE  -> );  Query OK, 0 rows affected (0.005 sec)  MariaDB [kostpoetrasultan]>  MariaDB [kostpoetrasultan]> CREATE TABLE penghuni\_email (  -> idPenghuni INT,  -> email VARCHAR(255),  -> FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET NULL  -> );  Query OK, 0 rows affected (0.004 sec)  MariaDB [kostpoetrasultan]>  MariaDB [kostpoetrasultan]> CREATE TABLE penghuni\_noTelp (  -> idPenghuni INT,  -> noTelp VARCHAR(255),  -> FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET NULL  -> );  Query OK, 0 rows affected (0.004 sec)  MariaDB [kostpoetrasultan]>  MariaDB [kostpoetrasultan]> CREATE TABLE menyewa (  -> idPenghuni INT,  -> tglMulaiSewa DATE,  -> tglAkhirSewa DATE,  -> FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET NULL  -> );  Query OK, 0 rows affected (0.003 sec)  MariaDB [kostpoetrasultan]>  MariaDB [kostpoetrasultan]> CREATE TABLE tipeKamar (  -> idTipeKamar INT PRIMARY KEY AUTO\_INCREMENT,  -> tipeKamar VARCHAR(255),  -> hargaKamar DECIMAL(10,2),  -> luasKamar DECIMAL(10,2)  -> );  Query OK, 0 rows affected (0.003 sec)  MariaDB [kostpoetrasultan]>  MariaDB [kostpoetrasultan]> CREATE TABLE kamar (  -> noKamar INT PRIMARY KEY AUTO\_INCREMENT,  -> idTipeKamar INT,  -> idPenghuni INT,  -> FOREIGN KEY (idTipeKamar) REFERENCES tipeKamar(idTipeKamar) ON DELETE SET NULL,  -> FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET NULL  -> );  Query OK, 0 rows affected (0.003 sec)  MariaDB [kostpoetrasultan]>  MariaDB [kostpoetrasultan]> CREATE TABLE transaksi (  -> idPenghuni INT,  -> noKamar INT,  -> idTipeKamar INT,  -> idTransaksi INT PRIMARY KEY AUTO\_INCREMENT,  -> jenisTransaksi ENUM('sewa kamar', 'air', 'listrik', 'denda'),  -> jumlahBiaya DECIMAL(10,2),  -> keterangan VARCHAR(255),  -> FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET NULL,  -> FOREIGN KEY (noKamar) REFERENCES kamar(noKamar) ON DELETE SET NULL,  -> FOREIGN KEY (idTipeKamar) REFERENCES tipeKamar(idTipeKamar)  -> );  Query OK, 0 rows affected (0.004 sec)  MariaDB [kostpoetrasultan]>  MariaDB [kostpoetrasultan]> CREATE TABLE membayar (  -> idPenghuni INT,  -> noKamar INT,  -> idTipeKamar INT,  -> idTransaksi INT PRIMARY KEY AUTO\_INCREMENT,  -> tglTransaksi DATE,  -> metodePembayaran ENUM('tunai', 'non-tunai'),  -> FOREIGN KEY (idPenghuni) REFERENCES penghuni(idPenghuni) ON DELETE SET NULL,  -> FOREIGN KEY (noKamar) REFERENCES kamar(noKamar) ON DELETE SET NULL,  -> FOREIGN KEY (idTipeKamar) REFERENCES tipeKamar(idTipeKamar) ON DELETE SET NULL,  -> FOREIGN KEY (idTransaksi) REFERENCES transaksi(idTransaksi)  -> );  Query OK, 0 rows affected (0.004 sec) |

Melihat daftar tabel yang ada di database

|  |
| --- |
| SHOW TABLES; |

Output:

|  |
| --- |
| MariaDB [kostpoetrasultan]> SHOW TABLES;  +----------------------------+  | Tables\_in\_kostpoetrasultan |  +----------------------------+  | kamar |  | membayar |  | menyewa |  | penghuni |  | penghuni\_email |  | penghuni\_notelp |  | tipekamar |  | transaksi |  +----------------------------+  8 rows in set (0.000 sec) |

Sebelum melakukan percobaan Store Procedure dan Trigger, dapat melakukan input data-data di database.

|  |
| --- |
| -- Penghuni  INSERT INTO penghuni (namaDepan, namaBelakang, jalan, RT, RW, kelurahan, kecamatan, kota, provinsi, kodePos, tanggalLahir)  VALUES  ('Budi', 'Santoso', 'Jl. Melati 123', 6, 12, 'Cipedes', 'Bandung', 'Jawa Barat', 'Jawa Barat', 40135, '1995-08-20'),  ('Ahmad', 'Wibowo', 'Jl. Kencana 456', 10, 15, 'Demangan', 'Yogyakarta', 'Yogyakarta', 'DI Yogyakarta', 55241, '1993-03-12'),  ('Rudi', 'Susilo', 'Jl. Anggrek 789', 14, 18, 'Sukolilo', 'Surabaya', 'Jawa Timur', 'Jawa Timur', 60223, '1994-12-05'),  ('Dwi', 'Sulistyo', 'Jl. Dahlia 567', 8, 22, 'Tirto', 'Semarang', 'Jawa Tengah', 'Jawa Tengah', 50148, '1992-06-18'),  ('Eko', 'Prasetyo', 'Jl. Mawar 890', 7, 11, 'Ciwidey', 'Bandung', 'Jawa Barat', 'Jawa Barat', 40354, '1996-10-25'),  ('Hendra', 'Kusuma', 'Jl. Srikaya 123', 5, 17, 'Kasihan', 'Bantul', 'Yogyakarta', 'DI Yogyakarta', 55183, '1994-02-15'),  ('Indra', 'Setiawan', 'Jl. Flamboyan 456', 12, 16, 'Kenjeran', 'Surabaya', 'Jawa Timur', 'Jawa Timur', 60122, '1993-08-08'),  ('Ade', 'Wijaya', 'Jl. Anggrek 789', 9, 23, 'Genuk', 'Semarang', 'Jawa Tengah', 'Jawa Tengah', 50245, '1995-05-20'),  ('Bayu', 'Nugroho', 'Jl. Kencur 234', 11, 14, 'Kalasan', 'Sleman', 'Yogyakarta', 'DI Yogyakarta', 55571, '1992-12-12'),  ('Dicky', 'Saputra', 'Jl. Mawar 567', 13, 19, 'Mulyorejo', 'Surabaya', 'Jawa Timur', 'Jawa Timur', 60223, '1994-07-17'),  ('Fandi', 'Surya', 'Jl. Kamboja 890', 6, 20, 'Banyumanik', 'Semarang', 'Jawa Tengah', 'Jawa Tengah', 50192, '1996-04-05'),  ('Galih', 'Purnama', 'Jl. Raya 123', 8, 21, 'Cangkringan', 'Sleman', 'Yogyakarta', 'DI Yogyakarta', 55582, '1993-01-22');  -- Menyewa Kamar  INSERT INTO menyewa (idPenghuni, tglMulaiSewa, tglAkhirSewa)  VALUES  (1, '2022-01-01', '2023-01-01'),  (2, '2022-01-01', '2023-01-01'),  (3, '2022-01-01', '2023-01-01'),  (4, '2022-01-01', '2023-01-01'),  (5, '2022-01-01', '2023-01-01'),  (6, '2022-01-01', '2023-01-01'),  (7, '2022-01-01', '2023-01-01'),  (8, '2022-01-01', '2023-01-01'),  (9, '2022-01-01', '2023-01-01'),  (10, '2022-01-01', '2023-01-01'),  (11, '2022-01-01', '2023-01-01'),  (12, '2022-01-01', '2023-01-01');  -- Penghuni Email  INSERT INTO penghuni\_email (idPenghuni, email)  VALUES  (1, 'budi.santoso@gmail.com'),  (1, 'budi.santoso@yahoo.com'),  (1, 'budi.santoso@outlook.com'),  (2, 'ahmad.wibowo@gmail.com'),  (2, 'ahmad.wibowo@yahoo.com'),  (3, 'rudi.susilo@gmail.com'),  (3, 'rudi.susilo@yahoo.com'),  (3, 'rudi.susilo@outlook.com'),  (4, 'dwi.sulistyo@gmail.com'),  (4, 'dwi.sulistyo@yahoo.com'),  (5, 'eko.prasetyo@gmail.com'),  (5, 'eko.prasetyo@yahoo.com'),  (5, 'eko.prasetyo@outlook.com'),  (6, 'hendra.kusuma@gmail.com'),  (6, 'hendra.kusuma@yahoo.com'),  (7, 'indra.setiawan@gmail.com'),  (8, 'ade.wijaya@gmail.com'),  (9, 'bayu.nugroho@gmail.com'),  (9, 'bayu.nugroho@yahoo.com'),  (9, 'bayu.nugroho@outlook.com'),  (10, 'dicky.saputra@gmail.com'),  (11, 'fandi.surya@gmail.com'),  (12, 'galih.purnama@gmail.com');  -- Penghuni NoTelp  INSERT INTO penghuni\_noTelp (idPenghuni, noTelp)  VALUES  (1, '081234567890'),  (2, '081234567890'),  (2, '081112233445'),  (3, '081234567890'),  (4, '081112233445'),  (5, '081234567890'),  (5, '081112233445'),  (6, '081234567890'),  (7, '081112233445'),  (8, '081234567890'),  (9, '081112233445'),  (10, '081234567890'),  (10, '081112233445'),  (11, '081234567890'),  (11, '081112233445'),  (12, '081234567890'),  (12, '081112233445');  -- Tipe Kamar  INSERT INTO tipeKamar (tipeKamar, hargaKamar, luasKamar)  VALUES  ('Tanpa Kamar Mandi', 800000.00, 12.5),  ('Dengan Kamar Mandi', 1200000.00, 15.0);  -- Kamar  INSERT INTO kamar (idTipeKamar, idPenghuni) VALUES  (1,1),(1,2),(1,3),(1,4),(2,5),(1,6),(1,7),(1,8),(2,9),(1,10),(2,11),(2,12);  -- Transaksi Januari  INSERT INTO transaksi (idPenghuni, noKamar, idTipeKamar, jenisTransaksi, jumlahBiaya, keterangan)  VALUES  (1, 1, 1, 'sewa kamar', 800000, 'Sewa kamar bulan Januari'),  (1, 1, 1, 'listrik', 200000, 'Listrik bulan Januari'),  (1, 1, 1, 'air', 150000, 'Air bulan Januari'),  (2, 2, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Januari'),  (2, 2, 1, 'listrik', 250000, 'Listrik bulan Januari'),  (2, 2, 1, 'air', 180000, 'Air bulan Januari'),  (3, 3, 1, 'sewa kamar', 800000, 'Sewa kamar bulan Januari'),  (3, 3, 1, 'listrik', 180000, 'Listrik bulan Januari'),  (3, 3, 1, 'air', 130000, 'Air bulan Januari'),  (4, 4, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Januari'),  (4, 4, 1, 'listrik', 220000, 'Listrik bulan Januari'),  (4, 4, 1, 'air', 160000, 'Air bulan Januari'),  (5, 5, 2, 'sewa kamar', 800000, 'Sewa kamar bulan Januari'),  (5, 5, 2, 'listrik', 190000, 'Listrik bulan Januari'),  (5, 5, 2, 'air', 140000, 'Air bulan Januari'),  (6, 6, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Januari'),  (6, 6, 1, 'listrik', 240000, 'Listrik bulan Januari'),  (6, 6, 1, 'air', 170000, 'Air bulan Januari'),  (7, 7, 1, 'sewa kamar', 800000, 'Sewa kamar bulan Januari'),  (7, 7, 1, 'listrik', 170000, 'Listrik bulan Januari'),  (7, 7, 1, 'air', 120000, 'Air bulan Januari'),  (8, 8, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Januari'),  (8, 8, 1, 'listrik', 210000, 'Listrik bulan Januari'),  (8, 8, 1, 'air', 150000, 'Air bulan Januari'),  (9, 9, 2, 'sewa kamar', 800000, 'Sewa kamar bulan Januari'),  (9, 9, 2, 'listrik', 200000, 'Listrik bulan Januari'),  (9, 9, 2, 'air', 140000, 'Air bulan Januari'),  (10, 10, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Januari'),  (10, 10, 1, 'listrik', 250000, 'Listrik bulan Januari'),  (10, 10, 1, 'air', 180000, 'Air bulan Januari'),  (11, 11, 2, 'sewa kamar', 800000, 'Sewa kamar bulan Januari'),  (11, 11, 2, 'listrik', 180000, 'Listrik bulan Januari'),  (11, 11, 2, 'air', 130000, 'Air bulan Januari'),  (12, 12, 2, 'sewa kamar', 1200000, 'Sewa kamar bulan Januari'),  (12, 12, 2, 'listrik', 220000, 'Listrik bulan Januari'),  (12, 12, 2, 'air', 160000, 'Air bulan Januari');  -- Transaksi Februari  INSERT INTO transaksi (idPenghuni, noKamar, idTipeKamar, jenisTransaksi, jumlahBiaya, keterangan)  VALUES  (1, 1, 1, 'sewa kamar', 800000, 'Sewa kamar bulan Februari'),  (1, 1, 1, 'listrik', 200000, 'Listrik bulan Februari'),  (1, 1, 1, 'air', 150000, 'Air bulan Februari'),  (2, 2, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Februari'),  (2, 2, 1, 'listrik', 250000, 'Listrik bulan Februari'),  (2, 2, 1, 'air', 180000, 'Air bulan Februari'),  (3, 3, 1, 'sewa kamar', 800000, 'Sewa kamar bulan Februari'),  (3, 3, 1, 'listrik', 180000, 'Listrik bulan Februari'),  (3, 3, 1, 'air', 130000, 'Air bulan Februari'),  (4, 4, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Februari'),  (4, 4, 1, 'listrik', 220000, 'Listrik bulan Februari'),  (4, 4, 1, 'air', 160000, 'Air bulan Februari'),  (5, 5, 2, 'sewa kamar', 800000, 'Sewa kamar bulan Februari'),  (5, 5, 2, 'listrik', 190000, 'Listrik bulan Februari'),  (5, 5, 2, 'air', 140000, 'Air bulan Februari'),  (6, 6, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Februari'),  (6, 6, 1, 'listrik', 240000, 'Listrik bulan Februari'),  (6, 6, 1, 'air', 170000, 'Air bulan Februari'),  (7, 7, 1, 'sewa kamar', 800000, 'Sewa kamar bulan Februari'),  (7, 7, 1, 'listrik', 170000, 'Listrik bulan Februari'),  (7, 7, 1, 'air', 120000, 'Air bulan Februari'),  (8, 8, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Februari'),  (8, 8, 1, 'listrik', 210000, 'Listrik bulan Februari'),  (8, 8, 1, 'air', 150000, 'Air bulan Februari'),  (9, 9, 2, 'sewa kamar', 800000, 'Sewa kamar bulan Februari'),  (9, 9, 2, 'listrik', 200000, 'Listrik bulan Februari'),  (9, 9, 2, 'air', 140000, 'Air bulan Februari'),  (10, 10, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Februari'),  (10, 10, 1, 'listrik', 250000, 'Listrik bulan Februari'),  (10, 10, 1, 'air', 180000, 'Air bulan Februari'),  (11, 11, 2, 'sewa kamar', 800000, 'Sewa kamar bulan Februari'),  (11, 11, 2, 'listrik', 180000, 'Listrik bulan Februari'),  (11, 11, 2, 'air', 130000, 'Air bulan Februari'),  (12, 12, 2, 'sewa kamar', 1200000, 'Sewa kamar bulan Februari'),  (12, 12, 2, 'listrik', 220000, 'Listrik bulan Februari'),  (12, 12, 2, 'air', 160000, 'Air bulan Februari');  -- Transaksi Maret  INSERT INTO transaksi (idPenghuni, noKamar, idTipeKamar, jenisTransaksi, jumlahBiaya, keterangan)  VALUES  (1, 1, 1, 'sewa kamar', 800000, 'Sewa kamar bulan Maret'),  (1, 1, 1, 'listrik', 200000, 'Listrik bulan Maret'),  (1, 1, 1, 'air', 150000, 'Air bulan Maret'),  (2, 2, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Maret'),  (2, 2, 1, 'listrik', 250000, 'Listrik bulan Maret'),  (2, 2, 1, 'air', 180000, 'Air bulan Maret'),  (3, 3, 1, 'sewa kamar', 800000, 'Sewa kamar bulan Maret'),  (3, 3, 1, 'listrik', 180000, 'Listrik bulan Maret'),  (3, 3, 1, 'air', 130000, 'Air bulan Maret'),  (4, 4, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Maret'),  (4, 4, 1, 'listrik', 220000, 'Listrik bulan Maret'),  (4, 4, 1, 'air', 160000, 'Air bulan Maret'),  (5, 5, 2, 'sewa kamar', 800000, 'Sewa kamar bulan Maret'),  (5, 5, 2, 'listrik', 190000, 'Listrik bulan Maret'),  (5, 5, 2, 'air', 140000, 'Air bulan Maret'),  (6, 6, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Maret'),  (6, 6, 1, 'listrik', 240000, 'Listrik bulan Maret'),  (6, 6, 1, 'air', 170000, 'Air bulan Maret'),  (7, 7, 1, 'sewa kamar', 800000, 'Sewa kamar bulan Maret'),  (7, 7, 1, 'listrik', 170000, 'Listrik bulan Maret'),  (7, 7, 1, 'air', 120000, 'Air bulan Maret'),  (8, 8, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Maret'),  (8, 8, 1, 'listrik', 210000, 'Listrik bulan Maret'),  (8, 8, 1, 'air', 150000, 'Air bulan Maret'),  (9, 9, 2, 'sewa kamar', 800000, 'Sewa kamar bulan Maret'),  (9, 9, 2, 'listrik', 200000, 'Listrik bulan Maret'),  (9, 9, 2, 'air', 140000, 'Air bulan Maret'),  (10, 10, 1, 'sewa kamar', 1200000, 'Sewa kamar bulan Maret'),  (10, 10, 1, 'listrik', 250000, 'Listrik bulan Maret'),  (10, 10, 1, 'air', 180000, 'Air bulan Maret'),  (11, 11, 2, 'sewa kamar', 800000, 'Sewa kamar bulan Maret'),  (11, 11, 2, 'listrik', 180000, 'Listrik bulan Maret'),  (11, 11, 2, 'air', 130000, 'Air bulan Maret'),  (12, 12, 2, 'sewa kamar', 1200000, 'Sewa kamar bulan Maret'),  (12, 12, 2, 'listrik', 220000, 'Listrik bulan Maret'),  (12, 12, 2, 'air', 160000, 'Air bulan Maret'),  (1, 1, 1, 'denda', 50000, 'Keterlambatan pembayaran sewa kamar bulan Maret'),  (4, 4, 1, 'denda', 60000, 'Keterlambatan pembayaran sewa kamar bulan Maret');  --membayar Januari  INSERT INTO membayar (idPenghuni, noKamar, idTipeKamar, idTransaksi, tglTransaksi, metodePembayaran)  VALUES  (1, 1, 1, 1, '2023-01-01', 'tunai'),  (1, 1, 1, 2, '2023-01-05', 'non-tunai'),  (1, 1, 1, 3, '2023-01-10', 'non-tunai'),  (2, 2, 1, 4, '2023-01-01', 'tunai'),  (2, 2, 1, 5, '2023-01-07', 'tunai'),  (2, 2, 1, 6, '2023-01-12', 'non-tunai'),  (3, 3, 1, 7, '2023-01-01', 'non-tunai'),  (3, 3, 1, 8, '2023-01-06', 'tunai'),  (3, 3, 1, 9, '2023-01-11', 'non-tunai'),  (4, 4, 2, 10, '2023-01-01', 'tunai'),  (4, 4, 2, 11, '2023-01-08', 'non-tunai'),  (4, 4, 2, 12, '2023-01-13', 'tunai'),  (5, 5, 1, 13, '2023-01-01', 'non-tunai'),  (5, 5, 1, 14, '2023-01-09', 'tunai'),  (5, 5, 1, 15, '2023-01-14', 'tunai'),  (6, 6, 2, 16, '2023-01-01', 'non-tunai'),  (6, 6, 2, 17, '2023-01-10', 'non-tunai'),  (6, 6, 2, 18, '2023-01-15', 'tunai'),  (7, 7, 1, 19, '2023-01-01', 'non-tunai'),  (7, 7, 1, 20, '2023-01-11', 'tunai'),  (7, 7, 1, 21, '2023-01-16', 'tunai'),  (8, 8, 1, 22, '2023-01-01', 'non-tunai'),  (8, 8, 1, 23, '2023-01-12', 'non-tunai'),  (8, 8, 1, 24, '2023-01-17', 'tunai'),  (9, 9, 2, 25, '2023-01-01', 'non-tunai'),  (9, 9, 2, 26, '2023-01-13', 'non-tunai'),  (9, 9, 2, 27, '2023-01-18', 'tunai'),  (10, 10, 1, 28, '2023-01-01', 'tunai'),  (10, 10, 1, 29, '2023-01-14', 'non-tunai'),  (10, 10, 1, 30, '2023-01-19', 'tunai'),  (11, 11, 2, 31, '2023-01-01', 'non-tunai'),  (11, 11, 2, 32, '2023-01-15', 'tunai'),  (11, 11, 2, 33, '2023-01-20', 'non-tunai'),  (12, 12, 2, 34, '2023-01-01', 'tunai'),  (12, 12, 2, 35, '2023-01-16', 'non-tunai'),  (12, 12, 2, 36, '2023-01-21', 'tunai');  -- membayar Februari  INSERT INTO membayar (idPenghuni, noKamar, idTipeKamar, idTransaksi, tglTransaksi, metodePembayaran)  VALUES  (1, 1, 1, 37, '2023-02-01', 'tunai'),  (1, 1, 1, 38, '2023-02-05', 'non-tunai'),  (1, 1, 1, 39, '2023-02-10', 'non-tunai'),  (2, 2, 1, 40, '2023-02-01', 'tunai'),  (2, 2, 1, 41, '2023-02-07', 'tunai'),  (2, 2, 1, 42, '2023-02-12', 'non-tunai'),  (3, 3, 1, 43, '2023-02-01', 'non-tunai'),  (3, 3, 1, 44, '2023-02-06', 'tunai'),  (3, 3, 1, 45, '2023-02-11', 'non-tunai'),  (4, 4, 2, 46, '2023-02-01', 'tunai'),  (4, 4, 2, 47, '2023-02-08', 'non-tunai'),  (4, 4, 2, 48, '2023-02-13', 'tunai'),  (5, 5, 1, 49, '2023-02-01', 'non-tunai'),  (5, 5, 1, 50, '2023-02-09', 'tunai'),  (5, 5, 1, 51, '2023-02-14', 'tunai'),  (6, 6, 2, 52, '2023-02-01', 'non-tunai'),  (6, 6, 2, 53, '2023-02-10', 'non-tunai'),  (6, 6, 2, 54, '2023-02-15', 'tunai'),  (7, 7, 1, 55, '2023-02-01', 'non-tunai'),  (7, 7, 1, 56, '2023-02-11', 'tunai'),  (7, 7, 1, 57, '2023-02-16', 'tunai'),  (8, 8, 1, 58, '2023-02-01', 'non-tunai'),  (8, 8, 1, 59, '2023-02-12', 'non-tunai'),  (8, 8, 1, 60, '2023-02-17', 'tunai'),  (9, 9, 2, 61, '2023-02-01', 'non-tunai'),  (9, 9, 2, 62, '2023-02-13', 'non-tunai'),  (9, 9, 2, 63, '2023-02-18', 'tunai'),  (10, 10, 1, 64, '2023-02-01', 'tunai'),  (10, 10, 1, 65, '2023-02-14', 'non-tunai'),  (10, 10, 1, 66, '2023-02-19', 'tunai'),  (11, 11, 2, 67, '2023-02-01', 'non-tunai'),  (11, 11, 2, 68, '2023-02-15', 'tunai'),  (11, 11, 2, 69, '2023-02-20', 'non-tunai'),  (12, 12, 2, 70, '2023-02-01', 'tunai'),  (12, 12, 2, 71, '2023-02-16', 'non-tunai'),  (12, 12, 2, 72, '2023-02-21', 'tunai');    -- membayar Maret  INSERT INTO membayar (idPenghuni, noKamar, idTipeKamar, idTransaksi, tglTransaksi, metodePembayaran)  VALUES  (1, 1, 1, 73, '2023-03-01', 'tunai'),  (1, 1, 1, 74, '2023-03-05', 'non-tunai'),  (1, 1, 1, 75, '2023-03-10', 'non-tunai'),  (2, 2, 1, 76, '2023-03-01', 'tunai'),  (2, 2, 1, 77, '2023-03-07', 'tunai'),  (2, 2, 1, 78, '2023-03-12', 'non-tunai'),  (3, 3, 1, 79, '2023-03-01', 'non-tunai'),  (3, 3, 1, 80, '2023-03-06', 'tunai'),  (3, 3, 1, 81, '2023-03-11', 'non-tunai'),  (4, 4, 2, 82, '2023-03-01', 'tunai'),  (4, 4, 2, 83, '2023-03-08', 'non-tunai'),  (4, 4, 2, 84, '2023-03-13', 'tunai'),  (5, 5, 1, 85, '2023-03-01', 'non-tunai'),  (5, 5, 1, 86, '2023-03-09', 'tunai'),  (5, 5, 1, 87, '2023-03-14', 'tunai'),  (6, 6, 2, 88, '2023-03-01', 'non-tunai'),  (6, 6, 2, 89, '2023-03-10', 'non-tunai'),  (6, 6, 2, 90, '2023-03-15', 'tunai'),  (7, 7, 1, 91, '2023-03-01', 'non-tunai'),  (7, 7, 1, 92, '2023-03-11', 'tunai'),  (7, 7, 1, 93, '2023-03-16', 'tunai'),  (8, 8, 1, 94, '2023-03-01', 'non-tunai'),  (8, 8, 1, 95, '2023-03-12', 'non-tunai'),  (8, 8, 1, 96, '2023-03-17', 'tunai'),  (9, 9, 2, 97, '2023-03-01', 'non-tunai'),  (9, 9, 2, 98, '2023-03-13', 'non-tunai'),  (9, 9, 2, 99, '2023-03-18', 'tunai'),  (10, 10, 1, 100, '2023-03-01', 'tunai'),  (10, 10, 1, 101, '2023-03-14', 'non-tunai'),  (10, 10, 1, 102, '2023-03-19', 'tunai'),  (11, 11, 2, 103, '2023-03-01', 'non-tunai'),  (11, 11, 2, 104, '2023-03-15', 'tunai'),  (11, 11, 2, 105, '2023-03-20', 'non-tunai'),  (12, 12, 2, 106, '2023-03-01', 'tunai'),  (12, 12, 2, 107, '2023-03-16', 'non-tunai'),  (12, 12, 2, 108, '2023-03-21', 'tunai'),  (1, 1, 1, 109, '2023-03-25', 'tunai'),  (4, 4, 1, 110, '2023-03-26', 'tunai'); |

1. **Store Procedure**

Perintah DESCRIBE dalam SQL digunakan untuk mendapatkan detail struktur tabel. Dalam hal ini, perintah DESCRIBE digunakan untuk mendapatkan detail struktur tabel 'kamar', 'membayar', 'menyewa', 'penghuni', 'penghuni\_email', 'penghuni\_notelp', 'tipekamar', dan 'transaksi'. Detail yang didapatkan meliputi nama kolom, tipe data, apakah kolom bisa bernilai NULL atau tidak, kunci (jika ada), nilai default (jika ada), dan ekstra (seperti AUTO\_INCREMENT).

|  |
| --- |
| DESCRIBE kamar;  DESCRIBE membayar;  DESCRIBE menyewa;  DESCRIBE penghuni;  DESCRIBE penghuni\_email;  DESCRIBE penghuni\_notelp;  DESCRIBE tipekamar;  DESCRIBE transaksi; |

Melihat seluruh isi atribut pada masing masing, untuk lebih mudah daripada menggunakan describe <nama\_tabel> dapat menggunakan fungsi berikut

|  |
| --- |
| DELIMITER $$  CREATE PROCEDURE DescribeAllTables()  BEGIN  DECLARE done INT DEFAULT FALSE;  DECLARE a CHAR(64);  DECLARE cur CURSOR FOR SELECT table\_name FROM information\_schema.tables WHERE table\_schema = 'kostpoetrasultan';  DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = TRUE;  OPEN cur;  read\_loop: LOOP  FETCH cur INTO a;  IF done THEN  LEAVE read\_loop;  END IF;  SET @s = CONCAT('DESCRIBE ', a);  PREPARE stmt FROM @s;  EXECUTE stmt;  END LOOP;  CLOSE cur;  END;  $$  DELIMITER ; |

Untuk memanggilnya hanya

|  |
| --- |
| CALL DescribeAllTables(); |

Output:

|  |
| --- |
| MariaDB [kostpoetrasultan]> CALL DescribeAllTables();  +-------------+---------+------+-----+---------+----------------+  | Field | Type | Null | Key | Default | Extra |  +-------------+---------+------+-----+---------+----------------+  | noKamar | int(11) | NO | PRI | NULL | auto\_increment |  | idTipeKamar | int(11) | YES | MUL | NULL | |  | idPenghuni | int(11) | YES | MUL | NULL | |  +-------------+---------+------+-----+---------+----------------+  3 rows in set (0.006 sec)  +------------------+---------------------------+------+-----+---------+----------------+  | Field | Type | Null | Key | Default | Extra |  +------------------+---------------------------+------+-----+---------+----------------+  | idPenghuni | int(11) | YES | MUL | NULL | |  | noKamar | int(11) | YES | MUL | NULL | |  | idTipeKamar | int(11) | YES | MUL | NULL | |  | idTransaksi | int(11) | NO | PRI | NULL | auto\_increment |  | tglTransaksi | date | YES | | NULL | |  | metodePembayaran | enum('tunai','non-tunai') | YES | | NULL | |  +------------------+---------------------------+------+-----+---------+----------------+  6 rows in set (0.010 sec)  +--------------+---------+------+-----+---------+-------+  | Field | Type | Null | Key | Default | Extra |  +--------------+---------+------+-----+---------+-------+  | idPenghuni | int(11) | YES | MUL | NULL | |  | tglMulaiSewa | date | YES | | NULL | |  | tglAkhirSewa | date | YES | | NULL | |  +--------------+---------+------+-----+---------+-------+  3 rows in set (0.022 sec)  +--------------+--------------+------+-----+---------+----------------+  | Field | Type | Null | Key | Default | Extra |  +--------------+--------------+------+-----+---------+----------------+  | idPenghuni | int(11) | NO | PRI | NULL | auto\_increment |  | namaDepan | varchar(255) | YES | | NULL | |  | namaBelakang | varchar(255) | YES | | NULL | |  | jalan | varchar(255) | YES | | NULL | |  | RT | int(11) | YES | | NULL | |  | RW | int(11) | YES | | NULL | |  | kelurahan | varchar(255) | YES | | NULL | |  | kecamatan | varchar(255) | YES | | NULL | |  | kota | varchar(255) | YES | | NULL | |  | provinsi | varchar(255) | YES | | NULL | |  | kodePos | int(11) | YES | | NULL | |  | tanggalLahir | date | YES | | NULL | |  +--------------+--------------+------+-----+---------+----------------+  12 rows in set (0.027 sec)  +------------+--------------+------+-----+---------+-------+  | Field | Type | Null | Key | Default | Extra |  +------------+--------------+------+-----+---------+-------+  | idPenghuni | int(11) | YES | MUL | NULL | |  | email | varchar(255) | YES | | NULL | |  +------------+--------------+------+-----+---------+-------+  2 rows in set (0.046 sec)  +------------+--------------+------+-----+---------+-------+  | Field | Type | Null | Key | Default | Extra |  +------------+--------------+------+-----+---------+-------+  | idPenghuni | int(11) | YES | MUL | NULL | |  | noTelp | varchar(255) | YES | | NULL | |  +------------+--------------+------+-----+---------+-------+  2 rows in set (0.049 sec)  +-------------+---------------+------+-----+---------+----------------+  | Field | Type | Null | Key | Default | Extra |  +-------------+---------------+------+-----+---------+----------------+  | idTipeKamar | int(11) | NO | PRI | NULL | auto\_increment |  | tipeKamar | varchar(255) | YES | | NULL | |  | hargaKamar | decimal(10,2) | YES | | NULL | |  | luasKamar | decimal(10,2) | YES | | NULL | |  +-------------+---------------+------+-----+---------+----------------+  4 rows in set (0.052 sec)  +----------------+--------------------------------------------+------+-----+---------+----------------+  | Field | Type | Null | Key | Default | Extra |  +----------------+--------------------------------------------+------+-----+---------+----------------+  | idPenghuni | int(11) | YES | MUL | NULL | |  | noKamar | int(11) | YES | MUL | NULL | |  | idTipeKamar | int(11) | YES | MUL | NULL | |  | idTransaksi | int(11) | NO | PRI | NULL | auto\_increment |  | jenisTransaksi | enum('sewa kamar','air','listrik','denda') | YES | | NULL | |  | jumlahBiaya | decimal(10,2) | YES | | NULL | |  | keterangan | varchar(255) | YES | | NULL | |  +----------------+--------------------------------------------+------+-----+---------+----------------+  7 rows in set (0.059 sec)  Query OK, 0 rows affected (0.076 sec) |

Melihat isi data semua data pada masing-masing tabel dengan

|  |
| --- |
| DELIMITER //  CREATE PROCEDURE ShowAllTables()  BEGIN  DECLARE done INT DEFAULT 0;  DECLARE tableName VARCHAR(255);  DECLARE cur CURSOR FOR  SELECT table\_name  FROM information\_schema.tables  WHERE table\_schema = DATABASE();  DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;  OPEN cur;  read\_loop: LOOP  FETCH cur INTO tableName;  IF done THEN  LEAVE read\_loop;  END IF;  SET @s = CONCAT('SELECT \* FROM ', tableName);  PREPARE stmt FROM @s;  EXECUTE stmt;  DEALLOCATE PREPARE stmt;  END LOOP;  CLOSE cur;  END //  DELIMITER ; |

Untuk memanggilnya

|  |
| --- |
| CALL ShowAllTables(); |

Hasil output

|  |  |
| --- | --- |
| MariaDB [kostpoetrasultan]> DELIMITER //  MariaDB [kostpoetrasultan]> CREATE PROCEDURE ShowAllTables()  -> BEGIN  -> DECLARE done INT DEFAULT 0;  -> DECLARE tableName VARCHAR(255);  -> DECLARE cur CURSOR FOR  -> SELECT table\_name  -> FROM information\_schema.tables  -> WHERE table\_schema = DATABASE();  -> DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;  ->  -> OPEN cur;  -> read\_loop: LOOP  -> FETCH cur INTO tableName;  -> IF done THEN  -> LEAVE read\_loop;  -> END IF;  -> SET @s = CONCAT('SELECT \* FROM ', tableName);  -> PREPARE stmt FROM @s;  -> EXECUTE stmt;  -> DEALLOCATE PREPARE stmt;  -> END LOOP;  -> CLOSE cur;  -> END //  Query OK, 0 rows affected (0.006 sec)  MariaDB [kostpoetrasultan]> DELIMITER ;  MariaDB [kostpoetrasultan]> CALL ShowAllTables();  +---------+-------------+------------+  | noKamar | idTipeKamar | idPenghuni |  +---------+-------------+------------+  | 1 | 1 | 1 |  | 2 | 1 | 2 |  | 3 | 1 | 3 |  | 4 | 1 | 4 |  | 5 | 2 | 5 |  | 6 | 1 | 6 |  | 7 | 1 | 7 |  | 8 | 1 | 8 |  | 9 | 2 | 9 |  | 10 | 1 | 10 |  | 11 | 2 | 11 |  | 12 | 2 | 12 |  +---------+-------------+------------+  12 rows in set (0.004 sec)  +------------+---------+-------------+-------------+--------------+------------------+  | idPenghuni | noKamar | idTipeKamar | idTransaksi | tglTransaksi | metodePembayaran |  +------------+---------+-------------+-------------+--------------+------------------+  | 1 | 1 | 1 | 1 | 2023-01-01 | tunai |  | 1 | 1 | 1 | 2 | 2023-01-05 | non-tunai |  | 1 | 1 | 1 | 3 | 2023-01-10 | non-tunai |  | 2 | 2 | 1 | 4 | 2023-01-01 | tunai |  | 2 | 2 | 1 | 5 | 2023-01-07 | tunai |  | 2 | 2 | 1 | 6 | 2023-01-12 | non-tunai |  | 3 | 3 | 1 | 7 | 2023-01-01 | non-tunai |  | 3 | 3 | 1 | 8 | 2023-01-06 | tunai |  | 3 | 3 | 1 | 9 | 2023-01-11 | non-tunai |  | 4 | 4 | 2 | 10 | 2023-01-01 | tunai |  | 4 | 4 | 2 | 11 | 2023-01-08 | non-tunai |  | 4 | 4 | 2 | 12 | 2023-01-13 | tunai |  | 5 | 5 | 1 | 13 | 2023-01-01 | non-tunai |  | 5 | 5 | 1 | 14 | 2023-01-09 | tunai |  | 5 | 5 | 1 | 15 | 2023-01-14 | tunai |  | 6 | 6 | 2 | 16 | 2023-01-01 | non-tunai |  | 6 | 6 | 2 | 17 | 2023-01-10 | non-tunai |  | 6 | 6 | 2 | 18 | 2023-01-15 | tunai |  | 7 | 7 | 1 | 19 | 2023-01-01 | non-tunai |  | 7 | 7 | 1 | 20 | 2023-01-11 | tunai |  | 7 | 7 | 1 | 21 | 2023-01-16 | tunai |  | 8 | 8 | 1 | 22 | 2023-01-01 | non-tunai |  | 8 | 8 | 1 | 23 | 2023-01-12 | non-tunai |  | 8 | 8 | 1 | 24 | 2023-01-17 | tunai |  | 9 | 9 | 2 | 25 | 2023-01-01 | non-tunai |  | 9 | 9 | 2 | 26 | 2023-01-13 | non-tunai |  | 9 | 9 | 2 | 27 | 2023-01-18 | tunai |  | 10 | 10 | 1 | 28 | 2023-01-01 | tunai |  | 10 | 10 | 1 | 29 | 2023-01-14 | non-tunai |  | 10 | 10 | 1 | 30 | 2023-01-19 | tunai |  | 11 | 11 | 2 | 31 | 2023-01-01 | non-tunai |  | 11 | 11 | 2 | 32 | 2023-01-15 | tunai |  | 11 | 11 | 2 | 33 | 2023-01-20 | non-tunai |  | 12 | 12 | 2 | 34 | 2023-01-01 | tunai |  | 12 | 12 | 2 | 35 | 2023-01-16 | non-tunai |  | 12 | 12 | 2 | 36 | 2023-01-21 | tunai |  | 1 | 1 | 1 | 37 | 2023-02-01 | tunai |  | 1 | 1 | 1 | 38 | 2023-02-05 | non-tunai |  | 1 | 1 | 1 | 39 | 2023-02-10 | non-tunai |  | 2 | 2 | 1 | 40 | 2023-02-01 | tunai |  | 2 | 2 | 1 | 41 | 2023-02-07 | tunai |  | 2 | 2 | 1 | 42 | 2023-02-12 | non-tunai |  | 3 | 3 | 1 | 43 | 2023-02-01 | non-tunai |  | 3 | 3 | 1 | 44 | 2023-02-06 | tunai |  | 3 | 3 | 1 | 45 | 2023-02-11 | non-tunai |  | 4 | 4 | 2 | 46 | 2023-02-01 | tunai |  | 4 | 4 | 2 | 47 | 2023-02-08 | non-tunai |  | 4 | 4 | 2 | 48 | 2023-02-13 | tunai |  | 5 | 5 | 1 | 49 | 2023-02-01 | non-tunai |  | 5 | 5 | 1 | 50 | 2023-02-09 | tunai |  | 5 | 5 | 1 | 51 | 2023-02-14 | tunai |  | 6 | 6 | 2 | 52 | 2023-02-01 | non-tunai |  | 6 | 6 | 2 | 53 | 2023-02-10 | non-tunai |  | 6 | 6 | 2 | 54 | 2023-02-15 | tunai |  | 7 | 7 | 1 | 55 | 2023-02-01 | non-tunai |  | 7 | 7 | 1 | 56 | 2023-02-11 | tunai |  | 7 | 7 | 1 | 57 | 2023-02-16 | tunai |  | 8 | 8 | 1 | 58 | 2023-02-01 | non-tunai |  | 8 | 8 | 1 | 59 | 2023-02-12 | non-tunai |  | 8 | 8 | 1 | 60 | 2023-02-17 | tunai |  | 9 | 9 | 2 | 61 | 2023-02-01 | non-tunai |  | 9 | 9 | 2 | 62 | 2023-02-13 | non-tunai |  | 9 | 9 | 2 | 63 | 2023-02-18 | tunai |  | 10 | 10 | 1 | 64 | 2023-02-01 | tunai |  | 10 | 10 | 1 | 65 | 2023-02-14 | non-tunai |  | 10 | 10 | 1 | 66 | 2023-02-19 | tunai |  | 11 | 11 | 2 | 67 | 2023-02-01 | non-tunai |  | 11 | 11 | 2 | 68 | 2023-02-15 | tunai |  | 11 | 11 | 2 | 69 | 2023-02-20 | non-tunai |  | 12 | 12 | 2 | 70 | 2023-02-01 | tunai |  | 12 | 12 | 2 | 71 | 2023-02-16 | non-tunai |  | 12 | 12 | 2 | 72 | 2023-02-21 | tunai |  | 1 | 1 | 1 | 73 | 2023-03-01 | tunai |  | 1 | 1 | 1 | 74 | 2023-03-05 | non-tunai |  | 1 | 1 | 1 | 75 | 2023-03-10 | non-tunai |  | 2 | 2 | 1 | 76 | 2023-03-01 | tunai |  | 2 | 2 | 1 | 77 | 2023-03-07 | tunai |  | 2 | 2 | 1 | 78 | 2023-03-12 | non-tunai |  | 3 | 3 | 1 | 79 | 2023-03-01 | non-tunai |  | 3 | 3 | 1 | 80 | 2023-03-06 | tunai |  | 3 | 3 | 1 | 81 | 2023-03-11 | non-tunai |  | 4 | 4 | 2 | 82 | 2023-03-01 | tunai |  | 4 | 4 | 2 | 83 | 2023-03-08 | non-tunai |  | 4 | 4 | 2 | 84 | 2023-03-13 | tunai |  | 5 | 5 | 1 | 85 | 2023-03-01 | non-tunai |  | 5 | 5 | 1 | 86 | 2023-03-09 | tunai |  | 5 | 5 | 1 | 87 | 2023-03-14 | tunai |  | 6 | 6 | 2 | 88 | 2023-03-01 | non-tunai |  | 6 | 6 | 2 | 89 | 2023-03-10 | non-tunai |  | 6 | 6 | 2 | 90 | 2023-03-15 | tunai |  | 7 | 7 | 1 | 91 | 2023-03-01 | non-tunai |  | 7 | 7 | 1 | 92 | 2023-03-11 | tunai |  | 7 | 7 | 1 | 93 | 2023-03-16 | tunai |  | 8 | 8 | 1 | 94 | 2023-03-01 | non-tunai |  | 8 | 8 | 1 | 95 | 2023-03-12 | non-tunai |  | 8 | 8 | 1 | 96 | 2023-03-17 | tunai |  | 9 | 9 | 2 | 97 | 2023-03-01 | non-tunai |  | 9 | 9 | 2 | 98 | 2023-03-13 | non-tunai |  | 9 | 9 | 2 | 99 | 2023-03-18 | tunai |  | 10 | 10 | 1 | 100 | 2023-03-01 | tunai |  | 10 | 10 | 1 | 101 | 2023-03-14 | non-tunai |  | 10 | 10 | 1 | 102 | 2023-03-19 | tunai |  | 11 | 11 | 2 | 103 | 2023-03-01 | non-tunai |  | 11 | 11 | 2 | 104 | 2023-03-15 | tunai |  | 11 | 11 | 2 | 105 | 2023-03-20 | non-tunai |  | 12 | 12 | 2 | 106 | 2023-03-01 | tunai |  | 12 | 12 | 2 | 107 | 2023-03-16 | non-tunai |  | 12 | 12 | 2 | 108 | 2023-03-21 | tunai |  | 1 | 1 | 1 | 109 | 2023-03-25 | tunai |  | 4 | 4 | 1 | 110 | 2023-03-26 | tunai |  +------------+---------+-------------+-------------+--------------+------------------+  110 rows in set (0.016 sec)  +------------+--------------+--------------+  | idPenghuni | tglMulaiSewa | tglAkhirSewa |  +------------+--------------+--------------+  | 1 | 2022-01-01 | 2023-01-01 |  | 2 | 2022-01-01 | 2023-01-01 |  | 3 | 2022-01-01 | 2023-01-01 |  | 4 | 2022-01-01 | 2023-01-01 |  | 5 | 2022-01-01 | 2023-01-01 |  | 6 | 2022-01-01 | 2023-01-01 |  | 7 | 2022-01-01 | 2023-01-01 |  | 8 | 2022-01-01 | 2023-01-01 |  | 9 | 2022-01-01 | 2023-01-01 |  | 10 | 2022-01-01 | 2023-01-01 |  | 11 | 2022-01-01 | 2023-01-01 |  | 12 | 2022-01-01 | 2023-01-01 |  +------------+--------------+--------------+  12 rows in set (0.259 sec)  +------------+-----------+--------------+-------------------+------+------+-------------+------------+-------------+---------------+---------+--------------+  | idPenghuni | namaDepan | namaBelakang | jalan | RT | RW | kelurahan | kecamatan | kota | provinsi | kodePos | tanggalLahir |  +------------+-----------+--------------+-------------------+------+------+-------------+------------+-------------+---------------+---------+--------------+  | 1 | Budi | Santoso | Jl. Melati 123 | 6 | 12 | Cipedes | Bandung | Jawa Barat | Jawa Barat | 40135 | 1995-08-20 |  | 2 | Ahmad | Wibowo | Jl. Kencana 456 | 10 | 15 | Demangan | Yogyakarta | Yogyakarta | DI Yogyakarta | 55241 | 1993-03-12 |  | 3 | Rudi | Susilo | Jl. Anggrek 789 | 14 | 18 | Sukolilo | Surabaya | Jawa Timur | Jawa Timur | 60223 | 1994-12-05 |  | 4 | Dwi | Sulistyo | Jl. Dahlia 567 | 8 | 22 | Tirto | Semarang | Jawa Tengah | Jawa Tengah | 50148 | 1992-06-18 |  | 5 | Eko | Prasetyo | Jl. Mawar 890 | 7 | 11 | Ciwidey | Bandung | Jawa Barat | Jawa Barat | 40354 | 1996-10-25 |  | 6 | Hendra | Kusuma | Jl. Srikaya 123 | 5 | 17 | Kasihan | Bantul | Yogyakarta | DI Yogyakarta | 55183 | 1994-02-15 |  | 7 | Indra | Setiawan | Jl. Flamboyan 456 | 12 | 16 | Kenjeran | Surabaya | Jawa Timur | Jawa Timur | 60122 | 1993-08-08 |  | 8 | Ade | Wijaya | Jl. Anggrek 789 | 9 | 23 | Genuk | Semarang | Jawa Tengah | Jawa Tengah | 50245 | 1995-05-20 |  | 9 | Bayu | Nugroho | Jl. Kencur 234 | 11 | 14 | Kalasan | Sleman | Yogyakarta | DI Yogyakarta | 55571 | 1992-12-12 |  | 10 | Dicky | Saputra | Jl. Mawar 567 | 13 | 19 | Mulyorejo | Surabaya | Jawa Timur | Jawa Timur | 60223 | 1994-07-17 |  | 11 | Fandi | Surya | Jl. Kamboja 890 | 6 | 20 | Banyumanik | Semarang | Jawa Tengah | Jawa Tengah | 50192 | 1996-04-05 |  | 12 | Galih | Purnama | Jl. Raya 123 | 8 | 21 | Cangkringan | Sleman | Yogyakarta | DI Yogyakarta | 55582 | 1993-01-22 |  +------------+-----------+--------------+-------------------+------+------+-------------+------------+-------------+---------------+---------+--------------+  12 rows in set (0.274 sec)  +------------+--------------------------+  | idPenghuni | email |  +------------+--------------------------+  | 1 | budi.santoso@gmail.com |  | 1 | budi.santoso@yahoo.com |  | 1 | budi.santoso@outlook.com |  | 2 | ahmad.wibowo@gmail.com |  | 2 | ahmad.wibowo@yahoo.com |  | 3 | rudi.susilo@gmail.com |  | 3 | rudi.susilo@yahoo.com |  | 3 | rudi.susilo@outlook.com |  | 4 | dwi.sulistyo@gmail.com |  | 4 | dwi.sulistyo@yahoo.com |  | 5 | eko.prasetyo@gmail.com |  | 5 | eko.prasetyo@yahoo.com |  | 5 | eko.prasetyo@outlook.com |  | 6 | hendra.kusuma@gmail.com |  | 6 | hendra.kusuma@yahoo.com |  | 7 | indra.setiawan@gmail.com |  | 8 | ade.wijaya@gmail.com |  | 9 | bayu.nugroho@gmail.com |  | 9 | bayu.nugroho@yahoo.com |  | 9 | bayu.nugroho@outlook.com |  | 10 | dicky.saputra@gmail.com |  | 11 | fandi.surya@gmail.com |  | 12 | galih.purnama@gmail.com |  +------------+--------------------------+  23 rows in set (0.323 sec)  +------------+--------------+  | idPenghuni | noTelp |  +------------+--------------+  | 1 | 081234567890 |  | 2 | 081234567890 |  | 2 | 081112233445 |  | 3 | 081234567890 |  | 4 | 081112233445 |  | 5 | 081234567890 |  | 5 | 081112233445 |  | 6 | 081234567890 |  | 7 | 081112233445 |  | 8 | 081234567890 |  | 9 | 081112233445 |  | 10 | 081234567890 |  | 10 | 081112233445 |  | 11 | 081234567890 |  | 11 | 081112233445 |  | 12 | 081234567890 |  | 12 | 081112233445 |  +------------+--------------+  17 rows in set (0.349 sec)  +-------------+--------------------+------------+-----------+  | idTipeKamar | tipeKamar | hargaKamar | luasKamar |  +-------------+--------------------+------------+-----------+  | 1 | Tanpa Kamar Mandi | 800000.00 | 12.50 |  | 2 | Dengan Kamar Mandi | 1200000.00 | 15.00 |  +-------------+--------------------+------------+-----------+  2 rows in set (0.362 sec)  +------------+---------+-------------+-------------+----------------+-------------+-------------------------------------------------+  | idPenghuni | noKamar | idTipeKamar | idTransaksi | jenisTransaksi | jumlahBiaya | keterangan |  +------------+---------+-------------+-------------+----------------+-------------+-------------------------------------------------+  | 1 | 1 | 1 | 1 | sewa kamar | 800000.00 | Sewa kamar bulan Januari |  | 1 | 1 | 1 | 2 | listrik | 200000.00 | Listrik bulan Januari |  | 1 | 1 | 1 | 3 | air | 150000.00 | Air bulan Januari |  | 2 | 2 | 1 | 4 | sewa kamar | 1200000.00 | Sewa kamar bulan Januari |  | 2 | 2 | 1 | 5 | listrik | 250000.00 | Listrik bulan Januari |  | 2 | 2 | 1 | 6 | air | 180000.00 | Air bulan Januari |  | 3 | 3 | 1 | 7 | sewa kamar | 800000.00 | Sewa kamar bulan Januari |  | 3 | 3 | 1 | 8 | listrik | 180000.00 | Listrik bulan Januari |  | 3 | 3 | 1 | 9 | air | 130000.00 | Air bulan Januari |  | 4 | 4 | 1 | 10 | sewa kamar | 1200000.00 | Sewa kamar bulan Januari |  | 4 | 4 | 1 | 11 | listrik | 220000.00 | Listrik bulan Januari |  | 4 | 4 | 1 | 12 | air | 160000.00 | Air bulan Januari |  | 5 | 5 | 2 | 13 | sewa kamar | 800000.00 | Sewa kamar bulan Januari |  | 5 | 5 | 2 | 14 | listrik | 190000.00 | Listrik bulan Januari |  | 5 | 5 | 2 | 15 | air | 140000.00 | Air bulan Januari |  | 6 | 6 | 1 | 16 | sewa kamar | 1200000.00 | Sewa kamar bulan Januari |  | 6 | 6 | 1 | 17 | listrik | 240000.00 | Listrik bulan Januari |  | 6 | 6 | 1 | 18 | air | 170000.00 | Air bulan Januari |  | 7 | 7 | 1 | 19 | sewa kamar | 800000.00 | Sewa kamar bulan Januari |  | 7 | 7 | 1 | 20 | listrik | 170000.00 | Listrik bulan Januari |  | 7 | 7 | 1 | 21 | air | 120000.00 | Air bulan Januari |  | 8 | 8 | 1 | 22 | sewa kamar | 1200000.00 | Sewa kamar bulan Januari |  | 8 | 8 | 1 | 23 | listrik | 210000.00 | Listrik bulan Januari |  | 8 | 8 | 1 | 24 | air | 150000.00 | Air bulan Januari |  | 9 | 9 | 2 | 25 | sewa kamar | 800000.00 | Sewa kamar bulan Januari |  | 9 | 9 | 2 | 26 | listrik | 200000.00 | Listrik bulan Januari |  | 9 | 9 | 2 | 27 | air | 140000.00 | Air bulan Januari |  | 10 | 10 | 1 | 28 | sewa kamar | 1200000.00 | Sewa kamar bulan Januari |  | 10 | 10 | 1 | 29 | listrik | 250000.00 | Listrik bulan Januari |  | 10 | 10 | 1 | 30 | air | 180000.00 | Air bulan Januari |  | 11 | 11 | 2 | 31 | sewa kamar | 800000.00 | Sewa kamar bulan Januari |  | 11 | 11 | 2 | 32 | listrik | 180000.00 | Listrik bulan Januari |  | 11 | 11 | 2 | 33 | air | 130000.00 | Air bulan Januari |  | 12 | 12 | 2 | 34 | sewa kamar | 1200000.00 | Sewa kamar bulan Januari |  | 12 | 12 | 2 | 35 | listrik | 220000.00 | Listrik bulan Januari |  | 12 | 12 | 2 | 36 | air | 160000.00 | Air bulan Januari |  | 1 | 1 | 1 | 37 | sewa kamar | 800000.00 | Sewa kamar bulan Februari |  | 1 | 1 | 1 | 38 | listrik | 200000.00 | Listrik bulan Februari |  | 1 | 1 | 1 | 39 | air | 150000.00 | Air bulan Februari |  | 2 | 2 | 1 | 40 | sewa kamar | 1200000.00 | Sewa kamar bulan Februari |  | 2 | 2 | 1 | 41 | listrik | 250000.00 | Listrik bulan Februari |  | 2 | 2 | 1 | 42 | air | 180000.00 | Air bulan Februari |  | 3 | 3 | 1 | 43 | sewa kamar | 800000.00 | Sewa kamar bulan Februari |  | 3 | 3 | 1 | 44 | listrik | 180000.00 | Listrik bulan Februari |  | 3 | 3 | 1 | 45 | air | 130000.00 | Air bulan Februari |  | 4 | 4 | 1 | 46 | sewa kamar | 1200000.00 | Sewa kamar bulan Februari |  | 4 | 4 | 1 | 47 | listrik | 220000.00 | Listrik bulan Februari |  | 4 | 4 | 1 | 48 | air | 160000.00 | Air bulan Februari |  | 5 | 5 | 2 | 49 | sewa kamar | 800000.00 | Sewa kamar bulan Februari |  | 5 | 5 | 2 | 50 | listrik | 190000.00 | Listrik bulan Februari |  | 5 | 5 | 2 | 51 | air | 140000.00 | Air bulan Februari |  | 6 | 6 | 1 | 52 | sewa kamar | 1200000.00 | Sewa kamar bulan Februari |  | 6 | 6 | 1 | 53 | listrik | 240000.00 | Listrik bulan Februari |  | 6 | 6 | 1 | 54 | air | 170000.00 | Air bulan Februari |  | 7 | 7 | 1 | 55 | sewa kamar | 800000.00 | Sewa kamar bulan Februari |  | 7 | 7 | 1 | 56 | listrik | 170000.00 | Listrik bulan Februari |  | 7 | 7 | 1 | 57 | air | 120000.00 | Air bulan Februari |  | 8 | 8 | 1 | 58 | sewa kamar | 1200000.00 | Sewa kamar bulan Februari |  | 8 | 8 | 1 | 59 | listrik | 210000.00 | Listrik bulan Februari |  | 8 | 8 | 1 | 60 | air | 150000.00 | Air bulan Februari |  | 9 | 9 | 2 | 61 | sewa kamar | 800000.00 | Sewa kamar bulan Februari |  | 9 | 9 | 2 | 62 | listrik | 200000.00 | Listrik bulan Februari |  | 9 | 9 | 2 | 63 | air | 140000.00 | Air bulan Februari |  | 10 | 10 | 1 | 64 | sewa kamar | 1200000.00 | Sewa kamar bulan Februari |  | 10 | 10 | 1 | 65 | listrik | 250000.00 | Listrik bulan Februari |  | 10 | 10 | 1 | 66 | air | 180000.00 | Air bulan Februari |  | 11 | 11 | 2 | 67 | sewa kamar | 800000.00 | Sewa kamar bulan Februari |  | 11 | 11 | 2 | 68 | listrik | 180000.00 | Listrik bulan Februari |  | 11 | 11 | 2 | 69 | air | 130000.00 | Air bulan Februari |  | 12 | 12 | 2 | 70 | sewa kamar | 1200000.00 | Sewa kamar bulan Februari |  | 12 | 12 | 2 | 71 | listrik | 220000.00 | Listrik bulan Februari |  | 12 | 12 | 2 | 72 | air | 160000.00 | Air bulan Februari |  | 1 | 1 | 1 | 73 | sewa kamar | 800000.00 | Sewa kamar bulan Maret |  | 1 | 1 | 1 | 74 | listrik | 200000.00 | Listrik bulan Maret |  | 1 | 1 | 1 | 75 | air | 150000.00 | Air bulan Maret |  | 2 | 2 | 1 | 76 | sewa kamar | 1200000.00 | Sewa kamar bulan Maret |  | 2 | 2 | 1 | 77 | listrik | 250000.00 | Listrik bulan Maret |  | 2 | 2 | 1 | 78 | air | 180000.00 | Air bulan Maret |  | 3 | 3 | 1 | 79 | sewa kamar | 800000.00 | Sewa kamar bulan Maret |  | 3 | 3 | 1 | 80 | listrik | 180000.00 | Listrik bulan Maret |  | 3 | 3 | 1 | 81 | air | 130000.00 | Air bulan Maret |  | 4 | 4 | 1 | 82 | sewa kamar | 1200000.00 | Sewa kamar bulan Maret |  | 4 | 4 | 1 | 83 | listrik | 220000.00 | Listrik bulan Maret |  | 4 | 4 | 1 | 84 | air | 160000.00 | Air bulan Maret |  | 5 | 5 | 2 | 85 | sewa kamar | 800000.00 | Sewa kamar bulan Maret |  | 5 | 5 | 2 | 86 | listrik | 190000.00 | Listrik bulan Maret |  | 5 | 5 | 2 | 87 | air | 140000.00 | Air bulan Maret |  | 6 | 6 | 1 | 88 | sewa kamar | 1200000.00 | Sewa kamar bulan Maret |  | 6 | 6 | 1 | 89 | listrik | 240000.00 | Listrik bulan Maret |  | 6 | 6 | 1 | 90 | air | 170000.00 | Air bulan Maret |  | 7 | 7 | 1 | 91 | sewa kamar | 800000.00 | Sewa kamar bulan Maret |  | 7 | 7 | 1 | 92 | listrik | 170000.00 | Listrik bulan Maret |  | 7 | 7 | 1 | 93 | air | 120000.00 | Air bulan Maret |  | 8 | 8 | 1 | 94 | sewa kamar | 1200000.00 | Sewa kamar bulan Maret |  | 8 | 8 | 1 | 95 | listrik | 210000.00 | Listrik bulan Maret |  | 8 | 8 | 1 | 96 | air | 150000.00 | Air bulan Maret |  | 9 | 9 | 2 | 97 | sewa kamar | 800000.00 | Sewa kamar bulan Maret |  | 9 | 9 | 2 | 98 | listrik | 200000.00 | Listrik bulan Maret |  | 9 | 9 | 2 | 99 | air | 140000.00 | Air bulan Maret |  | 10 | 10 | 1 | 100 | sewa kamar | 1200000.00 | Sewa kamar bulan Maret |  | 10 | 10 | 1 | 101 | listrik | 250000.00 | Listrik bulan Maret |  | 10 | 10 | 1 | 102 | air | 180000.00 | Air bulan Maret |  | 11 | 11 | 2 | 103 | sewa kamar | 800000.00 | Sewa kamar bulan Maret |  | 11 | 11 | 2 | 104 | listrik | 180000.00 | Listrik bulan Maret |  | 11 | 11 | 2 | 105 | air | 130000.00 | Air bulan Maret |  | 12 | 12 | 2 | 106 | sewa kamar | 1200000.00 | Sewa kamar bulan Maret |  | 12 | 12 | 2 | 107 | listrik | 220000.00 | Listrik bulan Maret |  | 12 | 12 | 2 | 108 | air | 160000.00 | Air bulan Maret |  | 1 | 1 | 1 | 109 | denda | 50000.00 | Keterlambatan pembayaran sewa kamar bulan Maret |  | 4 | 4 | 1 | 110 | denda | 60000.00 | Keterlambatan pembayaran sewa kamar bulan Maret |  +------------+---------+-------------+-------------+----------------+-------------+-------------------------------------------------+  110 rows in set (0.366 sec)  Query OK, 0 rows affected (0.709 sec) |  |

Mengecek apakah kamarnya kosong atau tidak

|  |
| --- |
| DELIMITER //  CREATE PROCEDURE CekStatusKamar(IN noKamarInput INT)  BEGIN  DECLARE idPenghuniDiKamar INT;  SELECT idPenghuni INTO idPenghuniDiKamar  FROM kamar  WHERE noKamar = noKamarInput;  IF idPenghuniDiKamar IS NOT NULL THEN  SELECT CONCAT('Kamar No ', noKamarInput, ' sedang ditempati.') as status;  ELSE  SELECT CONCAT('Kamar No ', noKamarInput, ' kosong.') as status;  END IF;  END //  DELIMITER ; |

Cara memanggilnya

|  |
| --- |
| CALL CekStatusKamar(<no\_kamar>); |

Contoh output

|  |
| --- |
| MariaDB [kostpoetrasultan]> DELIMITER //  MariaDB [kostpoetrasultan]> CREATE PROCEDURE CekStatusKamar(IN noKamarInput INT)  -> BEGIN  -> DECLARE idPenghuniDiKamar INT;  ->  -> SELECT idPenghuni INTO idPenghuniDiKamar  -> FROM kamar  -> WHERE noKamar = noKamarInput;  ->  -> IF idPenghuniDiKamar IS NOT NULL THEN  -> SELECT CONCAT('Kamar No ', noKamarInput, ' sedang ditempati.') as status;  -> ELSE  -> SELECT CONCAT('Kamar No ', noKamarInput, ' kosong.') as status;  -> END IF;  -> END //  Query OK, 0 rows affected (0.004 sec)  MariaDB [kostpoetrasultan]> DELIMITER ;  MariaDB [kostpoetrasultan]>  MariaDB [kostpoetrasultan]> CALL CekStatusKamar(1);  +------------------------------+  | status |  +------------------------------+  | Kamar No 1 sedang ditempati. |  +------------------------------+  1 row in set (0.001 sec)  Query OK, 1 row affected (0.003 sec) |

Soft reset untuk menghapus data yang ada di masing-masing tabel di database

|  |
| --- |
| DELIMITER //  CREATE PROCEDURE TruncateAllTablesInDatabase()  BEGIN  DECLARE \_done INT DEFAULT FALSE;  DECLARE \_tableName VARCHAR(255);  DECLARE \_cursor CURSOR FOR  SELECT table\_name  FROM information\_schema.tables  WHERE table\_schema = 'kostpoetrasultan';  DECLARE CONTINUE HANDLER FOR NOT FOUND SET \_done = TRUE;    SET FOREIGN\_KEY\_CHECKS = 0; -- menonaktifkan cek kunci asing    OPEN \_cursor;  read\_loop: LOOP  FETCH \_cursor INTO \_tableName;  IF \_done THEN  LEAVE read\_loop;  END IF;  SET @sql = CONCAT('TRUNCATE TABLE kostpoetrasultan.', \_tableName);  PREPARE stmt FROM @sql;  EXECUTE stmt;  DEALLOCATE PREPARE stmt;  END LOOP;  CLOSE \_cursor;    SET FOREIGN\_KEY\_CHECKS = 1;  END //  DELIMITER ; |

Untuk memanggilnya

|  |
| --- |
| CALL TruncateAllTablesInDatabase(); |

Hasil output

|  |
| --- |
| MariaDB [kostpoetrasultan]> DELIMITER //  MariaDB [kostpoetrasultan]> CREATE PROCEDURE TruncateAllTablesInDatabase()  -> BEGIN  -> DECLARE \_done INT DEFAULT FALSE;  -> DECLARE \_tableName VARCHAR(255);  -> DECLARE \_cursor CURSOR FOR  -> SELECT table\_name  -> FROM information\_schema.tables  -> WHERE table\_schema = 'kostpoetrasultan';  -> DECLARE CONTINUE HANDLER FOR NOT FOUND SET \_done = TRUE;  ->  -> SET FOREIGN\_KEY\_CHECKS = 0; -- menonaktifkan cek kunci asing  ->  -> OPEN \_cursor;  ->  -> read\_loop: LOOP  -> FETCH \_cursor INTO \_tableName;  ->  -> IF \_done THEN  -> LEAVE read\_loop;  -> END IF;  ->  -> SET @sql = CONCAT('TRUNCATE TABLE kostpoetrasultan.', \_tableName);  -> PREPARE stmt FROM @sql;  -> EXECUTE stmt;  -> DEALLOCATE PREPARE stmt;  -> END LOOP;  ->  -> CLOSE \_cursor;  ->  -> SET FOREIGN\_KEY\_CHECKS = 1;  -> END //  Query OK, 0 rows affected (0.006 sec)  MariaDB [kostpoetrasultan]> DELIMITER ;  MariaDB [kostpoetrasultan]> CALL TruncateAllTablesInDatabase();  Query OK, 0 rows affected (0.054 sec)  MariaDB [kostpoetrasultan]> select \* from transaksi;  Empty set (0.000 sec) |

Setelah kita cek, ternyata tabel transaksinya sudah kosong.

Mencoba membuat store procedure, input penghuni dengan prosedur.

|  |
| --- |
| DELIMITER $$  CREATE PROCEDURE `tambahPenghuni`(  IN \_namaDepan VARCHAR(255),  IN \_namaBelakang VARCHAR(255),  IN \_jalan VARCHAR(255),  IN \_RT INT,  IN \_RW INT,  IN \_kelurahan VARCHAR(255),  IN \_kecamatan VARCHAR(255),  IN \_kota VARCHAR(255),  IN \_provinsi VARCHAR(255),  IN \_kodePos INT,  IN \_tanggalLahir DATE,  IN \_emails TEXT,  IN \_noTelp TEXT,  IN \_tglMulaiSewa DATE,  IN \_tglAkhirSewa DATE,  IN \_idTipeKamar INT  )  BEGIN  DECLARE \_idPenghuni INT;  DECLARE \_noKamar INT;  DECLARE \_email VARCHAR(255);  DECLARE \_telp VARCHAR(255);  -- Menambahkan data penghuni  INSERT INTO penghuni (namaDepan, namaBelakang, jalan, RT, RW, kelurahan, kecamatan, kota, provinsi, kodePos, tanggalLahir)  VALUES (\_namaDepan, \_namaBelakang, \_jalan, \_RT, \_RW, \_kelurahan, \_kecamatan, \_kota, \_provinsi, \_kodePos, \_tanggalLahir);  SET \_idPenghuni = LAST\_INSERT\_ID();  -- Menambahkan data email penghuni  SET @emails = \_emails;  WHILE LOCATE(',', @emails) > 0 DO  SET \_email = SUBSTRING(@emails, 1, LOCATE(',', @emails) - 1);  SET @emails = SUBSTRING(@emails, LOCATE(',', @emails) + 1);  INSERT INTO penghuni\_email (idPenghuni, email) VALUES (\_idPenghuni, \_email);  END WHILE;  INSERT INTO penghuni\_email (idPenghuni, email) VALUES (\_idPenghuni, @emails);    -- Menambahkan data no telp penghuni  SET @telps = \_noTelp;  WHILE LOCATE(',', @telps) > 0 DO  SET \_telp = SUBSTRING(@telps, 1, LOCATE(',', @telps) - 1);  SET @telps = SUBSTRING(@telps, LOCATE(',', @telps) + 1);  INSERT INTO penghuni\_noTelp (idPenghuni, noTelp) VALUES (\_idPenghuni, \_telp);  END WHILE;  INSERT INTO penghuni\_noTelp (idPenghuni, noTelp) VALUES (\_idPenghuni, @telps);    -- Menambahkan data sewa penghuni  INSERT INTO menyewa (idPenghuni, tglMulaiSewa, tglAkhirSewa) VALUES (\_idPenghuni, \_tglMulaiSewa, \_tglAkhirSewa);    -- Menambahkan data kamar  INSERT INTO kamar (idTipeKamar, idPenghuni) VALUES (\_idTipeKamar, \_idPenghuni);  SET \_noKamar = LAST\_INSERT\_ID();    -- Menambahkan data transaksi  INSERT INTO transaksi (idPenghuni, noKamar, idTipeKamar, jenisTransaksi, jumlahBiaya, keterangan)  VALUES (\_idPenghuni, \_noKamar, \_idTipeKamar, 'sewa kamar', (SELECT hargaKamar FROM tipeKamar WHERE idTipeKamar = \_idTipeKamar), 'Transaksi sewa kamar otomatis');  INSERT INTO membayar (idPenghuni, noKamar, idTipeKamar, idTransaksi, tglTransaksi, metodePembayaran)  VALUES (\_idPenghuni, \_noKamar, \_idTipeKamar, LAST\_INSERT\_ID(), CURDATE(), 'tunai');  END$$  DELIMITER ; |

Cara pemanggilan, dengan contoh isi parameternya

|  |
| --- |
| CALL tambahPenghuni(  'Ahmad',  'Budi',  'Jl. Sudirman No. 45',  1,  2,  'Kebayoran Baru',  'Jakarta Selatan',  'Jakarta',  'DKI Jakarta',  12110,  '1990-05-10',  'ahmadbudi@gmail.com,ahmad.budi@yahoo.com',  '081234567890,085612345678',  '2023-01-01',  '2023-12-31',  1  ); |

Output

|  |
| --- |
| MariaDB [kostpoetrasultan]> CALL tambahPenghuni(  -> 'Ahmad',  -> 'Budi',  -> 'Jl. Sudirman No. 45',  -> 1,  -> 2,  -> 'Kebayoran Baru',  -> 'Jakarta Selatan',  -> 'Jakarta',  -> 'DKI Jakarta',  -> 12110,  -> '1990-05-10',  -> 'ahmadbudi@gmail.com,ahmad.budi@yahoo.com',  -> '081234567890,085612345678',  -> '2023-01-01',  -> '2023-12-31',  -> 1  -> );  Query OK, 9 rows affected (0.009 sec)  MariaDB [kostpoetrasultan]> select \* from penghuni;  +------------+-----------+--------------+---------------------+------+------+----------------+-----------------+---------+-------------+---------+--------------+  | idPenghuni | namaDepan | namaBelakang | jalan | RT | RW | kelurahan | kecamatan | kota | provinsi | kodePos | tanggalLahir |  +------------+-----------+--------------+---------------------+------+------+----------------+-----------------+---------+-------------+---------+--------------+  | 1 | Ahmad | Budi | Jl. Sudirman No. 45 | 1 | 2 | Kebayoran Baru | Jakarta Selatan | Jakarta | DKI Jakarta | 12110 | 1990-05-10 |  +------------+-----------+--------------+---------------------+------+------+----------------+-----------------+---------+-------------+---------+--------------+  1 row in set (0.000 sec)  MariaDB [kostpoetrasultan]> select \* from penghuni\_email;  +------------+----------------------+  | idPenghuni | email |  +------------+----------------------+  | 1 | ahmadbudi@gmail.com |  | 1 | ahmad.budi@yahoo.com |  +------------+----------------------+  2 rows in set (0.000 sec)  MariaDB [kostpoetrasultan]> select \* from penghuni\_notelp;  +------------+--------------+  | idPenghuni | noTelp |  +------------+--------------+  | 1 | 081234567890 |  | 1 | 085612345678 |  +------------+--------------+  2 rows in set (0.000 sec)  MariaDB [kostpoetrasultan]> select \* from kamar;  +---------+-------------+------------+  | noKamar | idTipeKamar | idPenghuni |  +---------+-------------+------------+  | 1 | 1 | 1 |  +---------+-------------+------------+  1 row in set (0.000 sec) |

Store Procedure Event Scheduler apabila sudah awal bulan yaitu setiap tanggal 1, maka semua penghuni akan ditetapkan biaya kost (sesuai tipe kamar yang dipilih) dan ditaruh di tabel transaksi.

|  |
| --- |
| CREATE PROCEDURE generateBiayaKost()  BEGIN  INSERT INTO transaksi (idPenghuni, noKamar, idTipeKamar, jenisTransaksi, jumlahBiaya, keterangan)  SELECT k.idPenghuni, k.noKamar, k.idTipeKamar, 'sewa kamar', t.hargaKamar, 'Biaya kost bulanan'  FROM kamar k  JOIN tipeKamar t ON k.idTipeKamar = t.idTipeKamar  WHERE k.idPenghuni IS NOT NULL;  END;  CREATE EVENT generateBiayaKostEvent  ON SCHEDULE EVERY 1 MONTH STARTS '2023-01-01'  DO CALL generateBiayaKost(); |

Jangan lupa menyalakan

|  |
| --- |
| SET GLOBAL event\_scheduler = ON; |

Prosedur analisis transaksi oleh pemilik kost

|  |
| --- |
| DELIMITER //  CREATE PROCEDURE analyzeTransactions()  BEGIN  DECLARE v\_finished INTEGER DEFAULT 0;  DECLARE v\_jenisTransaksi ENUM('sewa kamar', 'air', 'listrik', 'denda');  DECLARE v\_totalOmset DECIMAL(10,2);  DECLARE v\_rataRata DECIMAL(10,2);  DECLARE v\_max DECIMAL(10,2);  DECLARE v\_min DECIMAL(10,2);  DECLARE v\_maxMonth INT;  DECLARE v\_minMonth INT;  DECLARE v\_totalTransaksi INT;  DECLARE v\_rataTransaksiPerBulan DECIMAL(10,2);    DECLARE v\_totalOmsetAll DECIMAL(10,2);  DECLARE v\_totalTransaksiAll INT;  DECLARE v\_rataRataAll DECIMAL(10,2);  DECLARE v\_maxAll DECIMAL(10,2);  DECLARE v\_minAll DECIMAL(10,2);  DECLARE v\_maxMonthAll INT;  DECLARE v\_minMonthAll INT;  DECLARE v\_rataTransaksiPerBulanAll DECIMAL(10,2);  -- cursor untuk iterasi melalui jenis transaksi  DECLARE transaksi\_cursor CURSOR FOR SELECT DISTINCT jenisTransaksi FROM transaksi;  -- handler untuk deteksi akhir cursor  DECLARE CONTINUE HANDLER FOR NOT FOUND SET v\_finished = 1;  OPEN transaksi\_cursor;  get\_transaksi: LOOP  FETCH transaksi\_cursor INTO v\_jenisTransaksi;  IF v\_finished = 1 THEN  LEAVE get\_transaksi;  END IF;  -- mendapatkan total omset, rata-rata, max, min dan bulan dari transaksi max dan min  SELECT COUNT(\*) INTO v\_totalTransaksi FROM transaksi WHERE jenisTransaksi = v\_jenisTransaksi;  SELECT SUM(jumlahBiaya) INTO v\_totalOmset FROM transaksi WHERE jenisTransaksi = v\_jenisTransaksi;  SELECT AVG(jumlahBiaya) INTO v\_rataRata FROM transaksi WHERE jenisTransaksi = v\_jenisTransaksi;  SELECT MAX(jumlahBiaya) INTO v\_max FROM transaksi WHERE jenisTransaksi = v\_jenisTransaksi;  SELECT MIN(jumlahBiaya) INTO v\_min FROM transaksi WHERE jenisTransaksi = v\_jenisTransaksi;  SELECT MONTH((SELECT tglTransaksi FROM membayar WHERE idTransaksi = (SELECT idTransaksi FROM transaksi WHERE jenisTransaksi = v\_jenisTransaksi AND jumlahBiaya = v\_max LIMIT 1))) INTO v\_maxMonth;  SELECT MONTH((SELECT tglTransaksi FROM membayar WHERE idTransaksi = (SELECT idTransaksi FROM transaksi WHERE jenisTransaksi = v\_jenisTransaksi AND jumlahBiaya = v\_min LIMIT 1))) INTO v\_minMonth;  -- mendapatkan rata-rata transaksi per bulan  SELECT COUNT(\*) / 12 INTO v\_rataTransaksiPerBulan FROM membayar WHERE idTransaksi IN (SELECT idTransaksi FROM transaksi WHERE jenisTransaksi = v\_jenisTransaksi) AND YEAR(tglTransaksi) = YEAR(CURDATE());  -- output hasil  SELECT v\_jenisTransaksi AS 'Jenis Transaksi', v\_totalOmset AS 'Total Omset', v\_totalTransaksi AS 'Jumlah Transaksi', v\_rataRata AS 'Rata-Rata Transaksi', v\_max AS 'Transaksi Tertinghi', v\_maxMonth AS 'Bulan Transaksi Tertinggi', v\_min AS 'Transaksi Terendah', v\_minMonth AS 'Bulan Transaksi Terendah', v\_rataTransaksiPerBulan AS 'Rata-Rata Transaksi Per Bulan';  END LOOP get\_transaksi;    SELECT COUNT(\*) INTO v\_totalTransaksiAll FROM transaksi;  SELECT SUM(jumlahBiaya) INTO v\_totalOmsetAll FROM transaksi;  SELECT AVG(jumlahBiaya) INTO v\_rataRataAll FROM transaksi;  SELECT MAX(jumlahBiaya) INTO v\_maxAll FROM transaksi;  SELECT MIN(jumlahBiaya) INTO v\_minAll FROM transaksi;  SELECT MONTH((SELECT tglTransaksi FROM membayar WHERE idTransaksi = (SELECT idTransaksi FROM transaksi WHERE jumlahBiaya = v\_maxAll LIMIT 1))) INTO v\_maxMonthAll;  SELECT MONTH((SELECT tglTransaksi FROM membayar WHERE idTransaksi = (SELECT idTransaksi FROM transaksi WHERE jumlahBiaya = v\_minAll LIMIT 1))) INTO v\_minMonthAll;  SELECT COUNT(\*) / 12 INTO v\_rataTransaksiPerBulanAll FROM membayar WHERE idTransaksi IN (SELECT idTransaksi FROM transaksi) AND YEAR(tglTransaksi) = YEAR(CURDATE());  SELECT 'TOTAL' AS 'Jenis Transaksi', v\_totalOmsetAll AS 'Total Omset', v\_totalTransaksiAll AS 'Jumlah Transaksi', v\_rataRataAll AS 'Rata-Rata Transaksi', v\_maxAll AS 'Transaksi Tertinghi', v\_maxMonthAll AS 'Bulan Transaksi Tertinggi', v\_minAll AS 'Transaksi Terendah', v\_minMonthAll AS 'Bulan Transaksi Terendah', v\_rataTransaksiPerBulanAll AS 'Rata-Rata Transaksi Per Bulan';  CLOSE transaksi\_cursor;  END//  DELIMITER ; |

Output;

|  |
| --- |
| MariaDB [kostpoetrasultan]> CALL analyzeTransactions();  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | Jenis Transaksi | Total Omset | Jumlah Transaksi | Rata-Rata Transaksi | Transaksi Tertinghi | Bulan Transaksi Tertinggi | Transaksi Terendah | Bulan Transaksi Terendah | Rata-Rata Transaksi Per Bulan |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | sewa kamar | 36000000.00 | 36 | 1000000.00 | 1200000.00 | NULL | 800000.00 | NULL |  2.08 |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  1 row in set (0.001 sec)  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | Jenis Transaksi | Total Omset | Jumlah Transaksi | Rata-Rata Transaksi | Transaksi Tertinghi | Bulan Transaksi Tertinggi | Transaksi Terendah | Bulan Transaksi Terendah | Rata-Rata Transaksi Per Bulan |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | listrik | 7530000.00 | 36 | 209166.67 | 250000.00 | NULL | 170000.00 | NULL |  2.08 |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  1 row in set (0.004 sec)  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | Jenis Transaksi | Total Omset | Jumlah Transaksi | Rata-Rata Transaksi | Transaksi Tertinghi | Bulan Transaksi Tertinggi | Transaksi Terendah | Bulan Transaksi Terendah | Rata-Rata Transaksi Per Bulan |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | air | 5430000.00 | 36 | 150833.33 | 180000.00 | NULL | 120000.00 | NULL |  2.00 |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  1 row in set (0.007 sec)  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | Jenis Transaksi | Total Omset | Jumlah Transaksi | Rata-Rata Transaksi | Transaksi Tertinghi | Bulan Transaksi Tertinggi | Transaksi Terendah | Bulan Transaksi Terendah | Rata-Rata Transaksi Per Bulan |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | denda | 110000.00 | 2 | 55000.00 | 60000.00 | NULL | 50000.00 | NULL |  0.00 |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  1 row in set (0.009 sec)  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | Jenis Transaksi | Total Omset | Jumlah Transaksi | Rata-Rata Transaksi | Transaksi Tertinghi | Bulan Transaksi Tertinggi | Transaksi Terendah | Bulan Transaksi Terendah | Rata-Rata Transaksi Per Bulan |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  | TOTAL | 49070000.00 | 110 | 446090.91 | 1200000.00 | NULL | 50000.00 | NULL |  6.17 |  +-----------------+-------------+------------------+---------------------+---------------------+---------------------------+--------------------+--------------------------+-------------------------------+  1 row in set (0.012 sec)  Query OK, 40 rows affected, 1 warning (0.015 sec) |

1. Trigger

Pencegahan, apabila kita Insert itu harus kamar yang kosong

|  |
| --- |
| DELIMITER //  CREATE TRIGGER check\_availability  BEFORE INSERT ON kamar  FOR EACH ROW  BEGIN  DECLARE roomOccupied INT;  SELECT COUNT(\*) INTO roomOccupied FROM kamar WHERE noKamar = NEW.noKamar AND idPenghuni IS NOT NULL;  IF roomOccupied > 0 THEN  SIGNAL SQLSTATE '45000' SET MESSAGE\_TEXT = 'Gagal input: Kamar sudah ditempati.';  END IF;  END;  //  DELIMITER ; |

Output jika sudah ditempati, dengan custom error.

|  |
| --- |
| MariaDB [kostpoetrasultan]> INSERT INTO kamar(noKamar, idTipeKamar, idPenghuni) VALUES (1, 1, 1);  ERROR 1644 (45000): Gagal input: Kamar sudah ditempati. |

Membuat trigger akan berjalan setelah melakukan operasi INSERT pada tabel penghuni. Trigger akan otomatis membuat transaksi sewa kamar dengan harga kamar sesuai tipeKamar dari penghuni baru. Setelah itu, trigger juga akan membuat entri pada tabel membayar dengan metode pembayaran default sebagai 'tunai' dan tanggal transaksi adalah tanggal saat ini.

|  |
| --- |
| DELIMITER //  CREATE TRIGGER BiayaSewaKamarOtomatis  AFTER INSERT ON kamar  FOR EACH ROW  BEGIN  DECLARE hargaKamar DECIMAL(10,2);  DECLARE idTransaksi INT;    SELECT hargaKamar INTO hargaKamar FROM tipeKamar WHERE idTipeKamar = NEW.idTipeKamar;    INSERT INTO transaksi(idPenghuni, noKamar, idTipeKamar, jenisTransaksi, jumlahBiaya, keterangan)  VALUES (NEW.idPenghuni, NEW.noKamar, NEW.idTipeKamar, 'sewa kamar', hargaKamar, 'Transaksi sewa kamar otomatis');    SET idTransaksi = LAST\_INSERT\_ID();    IF hargaKamar IS NULL THEN  DELETE FROM transaksi WHERE idTransaksi = idTransaksi;  END IF;  END;  //  DELIMITER ; |

Output

|  |
| --- |
| MariaDB [kostpoetrasultan]> CALL tambahPenghuni(  -> 'Ahmad',  -> 'Budi',  -> 'Jl. Sudirman No. 45',  -> 1,  -> 2,  -> 'Kebayoran Baru',  -> 'Jakarta Selatan',  -> 'Jakarta',  -> 'DKI Jakarta',  -> 12110,  -> '1990-05-10',  -> 'ahmadbudi@gmail.com,ahmad.budi@yahoo.com',  -> '081234567890,085612345678',  -> '2023-01-01',  -> '2023-12-31',  -> 1  -> );  Query OK, 12 rows affected (0.015 sec)  MariaDB [kostpoetrasultan]> select \* from transaksi;  +------------+---------+-------------+-------------+----------------+-------------+-------------------------------+  | idPenghuni | noKamar | idTipeKamar | idTransaksi | jenisTransaksi | jumlahBiaya | keterangan |  +------------+---------+-------------+-------------+----------------+-------------+-------------------------------+  | 1 | 1 | 1 | 2 | sewa kamar | 800000.00 | Transaksi sewa kamar otomatis |  +------------+---------+-------------+-------------+----------------+-------------+-------------------------------+  1 row in set (0.000 sec) |