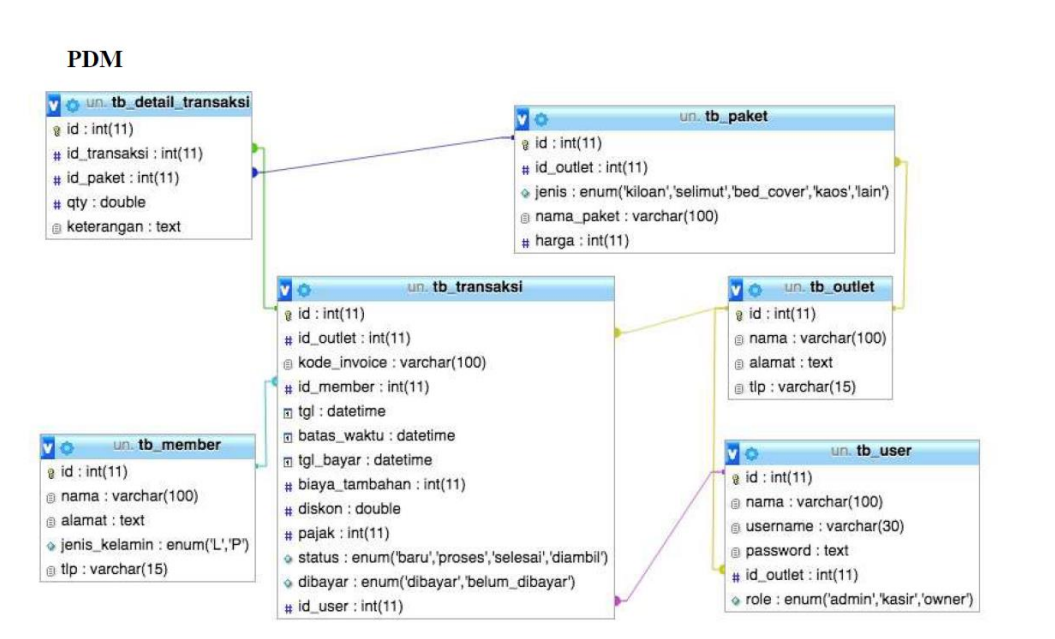
**SQL**



1. Buatlah basis data dengan nama laundry\_db !

|  |
| --- |
| CREATE DATABASE `laundry\_db` |

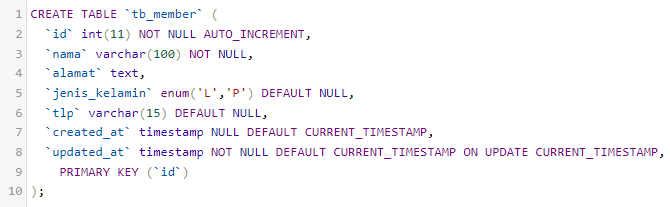


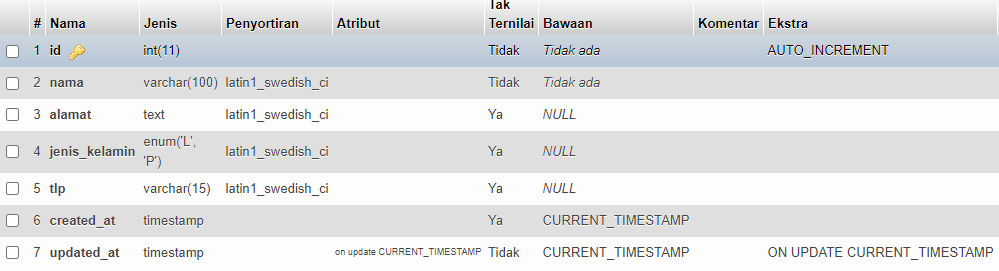


1. Buatlah semua tabel yang dibutuhkan sesuai rancangan !

Member

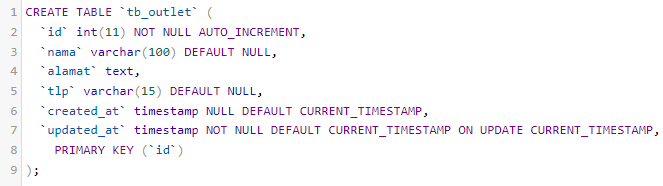
|  |
| --- |
| CREATE TABLE `tb\_member` (  CREATE TABLE `tb\_member` (  `id` int(11) NOT NULL AUTO\_INCREMENT,  `nama` varchar(100) NOT NULL,  `alamat` text,  `jenis\_kelamin` enum('L','P') DEFAULT NULL,  `tlp` varchar(15) DEFAULT NULL,  `created\_at` timestamp NULL DEFAULT CURRENT\_TIMESTAMP,  `updated\_at` timestamp NOT NULL DEFAULT CURRENT\_TIMESTAMP ON UPDATE CURRENT\_TIMESTAMP,  PRIMARY KEY (`id`)  ); |

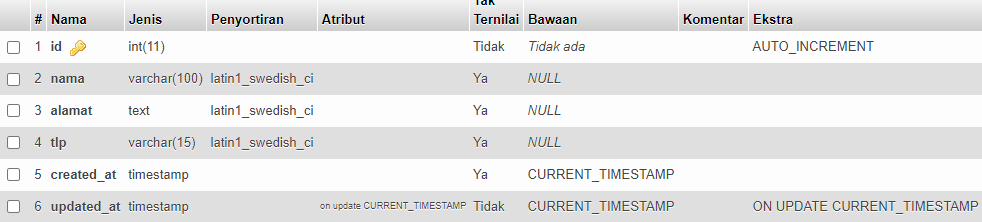




Outlet

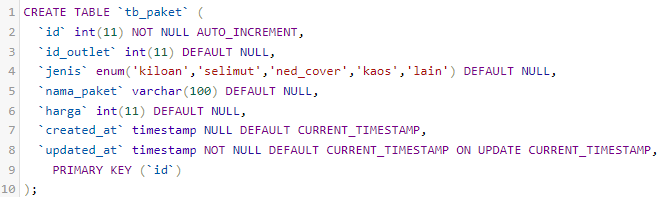
|  |
| --- |
| CREATE TABLE `tb\_outlet` (  `id` int(11) NOT NULL AUTO\_INCREMENT,  `nama` varchar(100) DEFAULT NULL,  `alamat` text,  `tlp` varchar(15) DEFAULT NULL,  `created\_at` timestamp NULL DEFAULT CURRENT\_TIMESTAMP,  `updated\_at` timestamp NOT NULL DEFAULT CURRENT\_TIMESTAMP ON UPDATE CURRENT\_TIMESTAMP,  PRIMARY KEY (`id`)  ); |

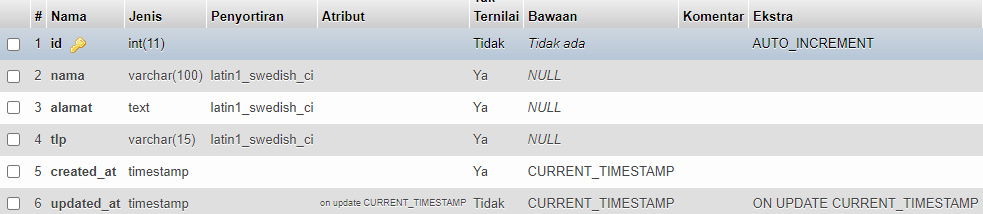




Paket

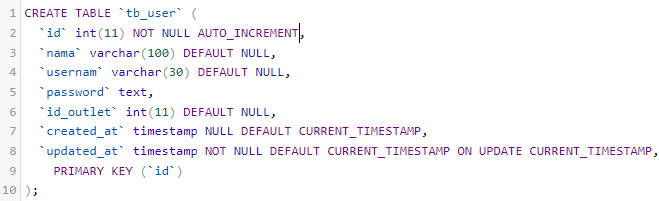
|  |
| --- |
| CREATE TABLE `tb\_paket` (  `id` int(11) NOT NULL AUTO\_INCREMENT,  `id\_outlet` int(11) DEFAULT NULL,  `jenis` enum('kiloan','selimut','ned\_cover','kaos','lain') DEFAULT NULL,  `nama\_paket` varchar(100) DEFAULT NULL,  `harga` int(11) DEFAULT NULL,  `created\_at` timestamp NULL DEFAULT CURRENT\_TIMESTAMP,  `updated\_at` timestamp NOT NULL DEFAULT CURRENT\_TIMESTAMP ON UPDATE CURRENT\_TIMESTAMP,  PRIMARY KEY (`id`)  ); |

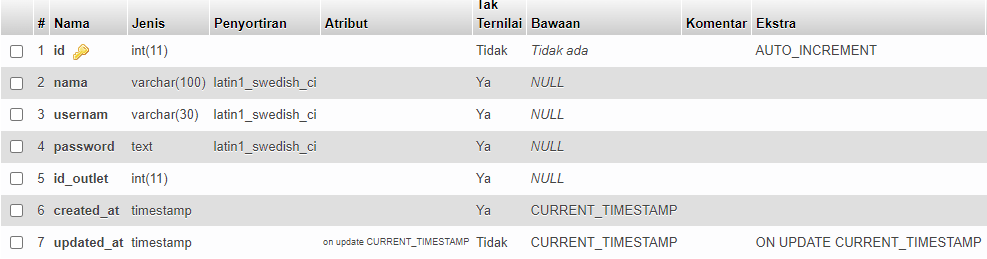




User

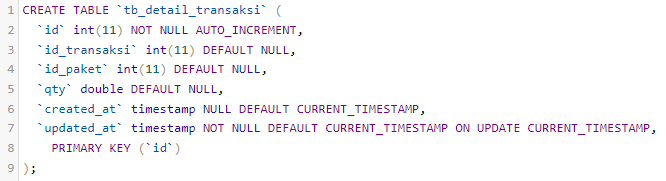
|  |
| --- |
| CREATE TABLE `tb\_user` (  `id` int(11) NOT NULL AUTO\_INCREMENT,  `nama` varchar(100) DEFAULT NULL,  `usernam` varchar(30) DEFAULT NULL,  `password` text,  `id\_outlet` int(11) DEFAULT NULL,  `created\_at` timestamp NULL DEFAULT CURRENT\_TIMESTAMP,  `updated\_at` timestamp NOT NULL DEFAULT CURRENT\_TIMESTAMP ON UPDATE CURRENT\_TIMESTAMP,  PRIMARY KEY (`id`)  ); |

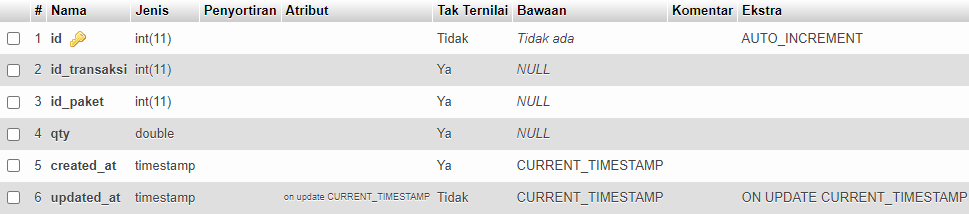




Detail Transaksi

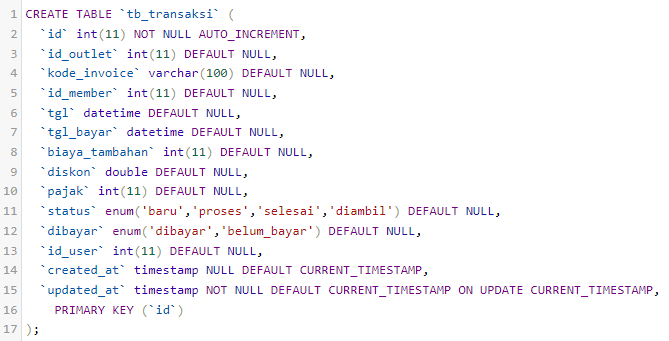
|  |
| --- |
| CREATE TABLE `tb\_detail\_transaksi` (  CREATE TABLE `tb\_detail\_transaksi` (  `id` int(11) NOT NULL AUTO\_INCREMENT,  `id\_transaksi` int(11) DEFAULT NULL,  `id\_paket` int(11) DEFAULT NULL,  `qty` double DEFAULT NULL,  `created\_at` timestamp NULL DEFAULT CURRENT\_TIMESTAMP,  `updated\_at` timestamp NOT NULL DEFAULT CURRENT\_TIMESTAMP ON UPDATE CURRENT\_TIMESTAMP,  PRIMARY KEY (`id`)  ); |

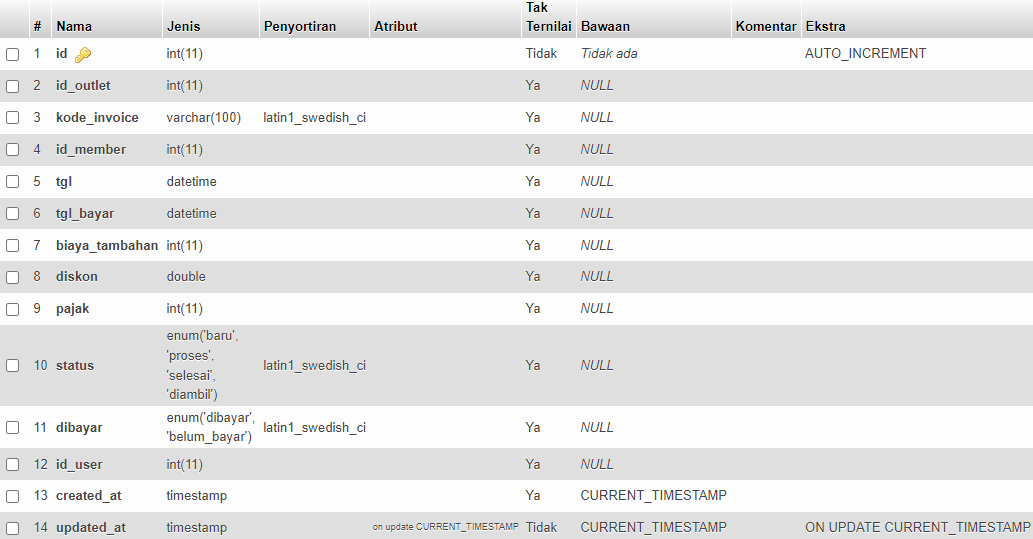




Transaksi

|  |
| --- |
| CREATE TABLE `tb\_transaksi` (  `id` int(11) NOT NULL AUTO\_INCREMENT,  `id\_outlet` int(11) DEFAULT NULL,  `kode\_invoice` varchar(100) DEFAULT NULL,  `id\_member` int(11) DEFAULT NULL,  `tgl` datetime DEFAULT NULL,  `tgl\_bayar` datetime DEFAULT NULL,  `biaya\_tambahan` int(11) DEFAULT NULL,  `diskon` double DEFAULT NULL,  `pajak` int(11) DEFAULT NULL,  `status` enum('baru','proses','selesai','diambil') DEFAULT NULL,  `dibayar` enum('dibayar','belum\_bayar') DEFAULT NULL,  `id\_user` int(11) DEFAULT NULL,  `created\_at` timestamp NULL DEFAULT CURRENT\_TIMESTAMP,  `updated\_at` timestamp NOT NULL DEFAULT CURRENT\_TIMESTAMP ON UPDATE CURRENT\_TIMESTAMP,  PRIMARY KEY (`id`)  ); |

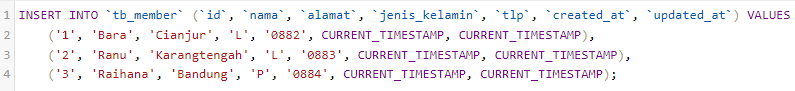




1. Lakukan penambahan data pada semua tabel master minimal 3 data tiap tabel !

Member

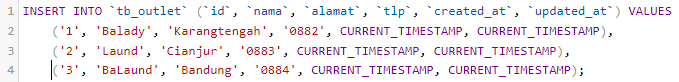
|  |
| --- |
| INSERT INTO `tb\_member` (`id`, `nama`, `alamat`, `jenis\_kelamin`, `tlp`, `created\_at`, `updated\_at`) VALUES  ('1', 'Bara', 'Cianjur', 'L', '0882', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('2', 'Ranu', 'Karangtengah', 'L', '0883', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('3', 'Raihana', 'Bandung', 'P', '0884', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP); |





Outlet

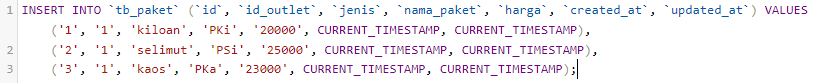
|  |
| --- |
| INSERT INTO `tb\_outlet` (`id`, `nama`, `alamat`, `tlp`, `created\_at`, `updated\_at`) VALUES  ('1', 'Balady', 'Karangtengah', '0882', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('2', 'Laund', 'Cianjur', '0883', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('3', 'BaLaund', 'Bandung', '0884', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP); |

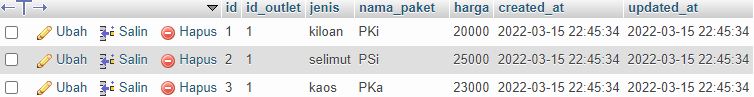




Paket

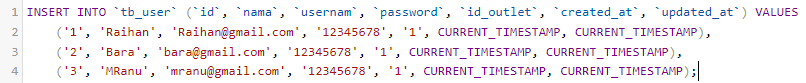
|  |
| --- |
| INSERT INTO `tb\_paket` (`id`, `id\_outlet`, `jenis`, `nama\_paket`, `harga`, `created\_at`, `updated\_at`) VALUES  ('1', '1', 'kiloan', 'PKi', '20000', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('2', '1', 'selimut', 'PSi', '25000', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('3', '1', 'kaos', 'PKa', '23000', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP); |

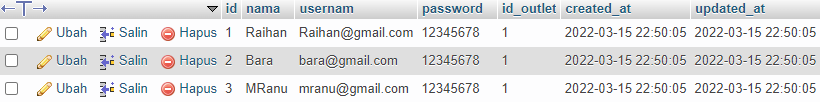




User

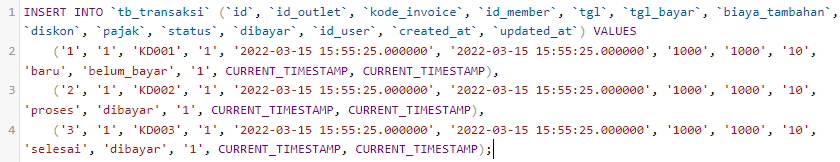
|  |
| --- |
| INSERT INTO `tb\_user` (`id`, `nama`, `usernam`, `password`, `id\_outlet`, `created\_at`, `updated\_at`) VALUES  ('1', 'Raihan', 'Raihan@gmail.com', '12345678', '1', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('2', 'Bara', 'bara@gmail.com', '12345678', '1', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('3', 'MRanu', 'mranu@gmail.com', '12345678', '1', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP); |

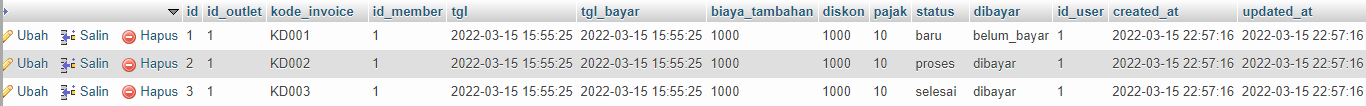




Transaksi

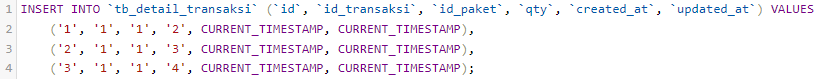
|  |
| --- |
| INSERT INTO `tb\_transaksi` (`id`, `id\_outlet`, `kode\_invoice`, `id\_member`, `tgl`, `tgl\_bayar`, `biaya\_tambahan`, `diskon`, `pajak`, `status`, `dibayar`, `id\_user`, `created\_at`, `updated\_at`) VALUES  ('1', '1', 'KD001', '1', '2022-03-15 15:55:25.000000', '2022-03-15 15:55:25.000000', '1000', '1000', '10', 'baru', 'belum\_bayar', '1', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('2', '1', 'KD002', '1', '2022-03-15 15:55:25.000000', '2022-03-15 15:55:25.000000', '1000', '1000', '10', 'proses', 'dibayar', '1', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('3', '1', 'KD003', '1', '2022-03-15 15:55:25.000000', '2022-03-15 15:55:25.000000', '1000', '1000', '10', 'selesai', 'dibayar', '1', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP); |





Detail Transaksi

|  |
| --- |
| INSERT INTO `tb\_detail\_transaksi` (`id`, `id\_transaksi`, `id\_paket`, `qty`, `created\_at`, `updated\_at`) VALUES  ('1', '1', '1', '2', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('2', '1', '1', '3', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP),  ('3', '1', '1', '4', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP); |





1. Lakukan perubahan data pada semua tabel master minimal 1 data tiap tabel

Member

|  |
| --- |
| UPDATE `tb\_member` SET `nama` = 'Raihan', `jenis\_kelamin` = 'L' WHERE `tb\_member`.`id` = 3; |





Outlet

|  |
| --- |
| UPDATE `tb\_outlet` SET `nama` = 'BaLa' WHERE `tb\_outlet`.`id` = 3; |

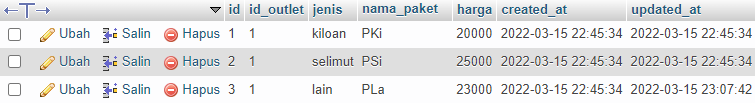




Paket

|  |
| --- |
| UPDATE `tb\_paket` SET `jenis` = 'lain', `nama\_paket` = 'PLa' WHERE `tb\_paket`.`id` = 3; |

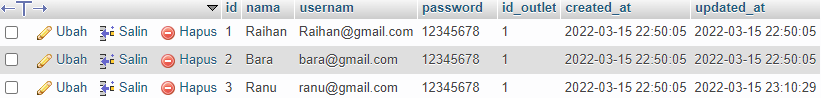




User

|  |
| --- |
| UPDATE `tb\_user` SET `nama` = 'Ranu', `usernam` = 'ranu@gmail.com' WHERE `tb\_user`.`id` = 3; |

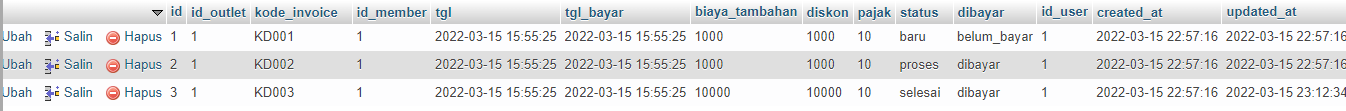




Transaksi

|  |
| --- |
| UPDATE `tb\_transaksi` SET `biaya\_tambahan` = '10000', `diskon` = '10000' WHERE `tb\_transaksi`.`id` = 3; |





Detail Transaksi

|  |
| --- |
| UPDATE `tb\_detail\_transaksi` SET `qty` = '2' WHERE `tb\_detail\_transaksi`.`id` = 3; |



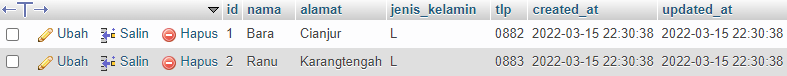


1. Lakukan penghapusan data pada semua tabel master minimal 1 data tiap tabel !

Member

|  |
| --- |
| DELETE FROM `tb\_member` WHERE `tb\_member`.`id` = 3 |

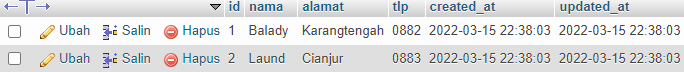




Outlet

|  |
| --- |
| DELETE FROM `tb\_outlet` WHERE `tb\_outlet`.`id` = 3 |

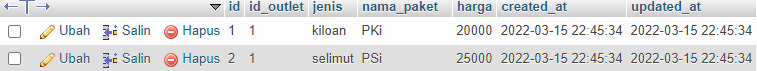




Paket

|  |
| --- |
| DELETE FROM `tb\_paket` WHERE `tb\_paket`.`id` = 3 |





User

|  |
| --- |
| DELETE FROM `tb\_user` WHERE `tb\_user`.`id` = 3 |

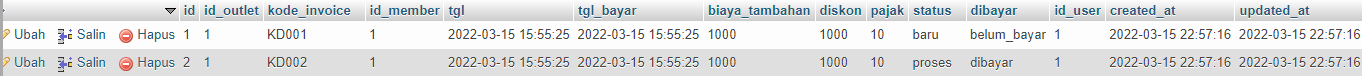




Transaksi

|  |
| --- |
| DELETE FROM `tb\_transaksi` WHERE `tb\_transaksi`.`id` = 3 |





Detail Transaksi

|  |
| --- |
| DELETE FROM `tb\_detail\_transaksi` WHERE `tb\_detail\_transaksi`.`id` = 3 |

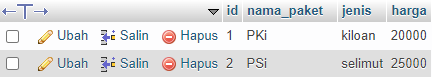




1. Buatlah instruksi SQL untuk menampilkan id, nama\_paket, Jenis, harga pada table paket yang harganya dibawah 50000 !

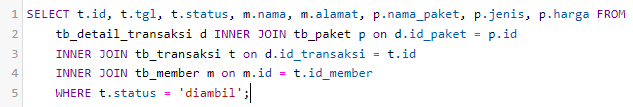
|  |
| --- |
| SELECT `id`, `nama\_paket`, `jenis`, `harga` FROM `tb\_paket` WHERE `harga` <= 50000 |





1. Buatlah instruksi SQL untuk menampilkan id, tgl, status (tabel Transaksi), nama, alamat (table member), nama\_paket, jenis, harga (table Paket) dimana data transaksi tersebut memiliki status “DIAMBIL”!

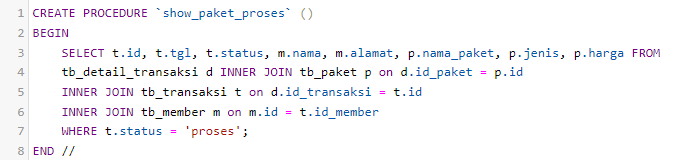
|  |
| --- |
| SELECT t.id, t.tgl, t.status, m.nama, m.alamat, p.nama\_paket, p.jenis, p.harga FROM  tb\_detail\_transaksi d INNER JOIN tb\_paket p on d.id\_paket = p.id  INNER JOIN tb\_transaksi t on d.id\_transaksi = t.id  INNER JOIN tb\_member m on m.id = t.id\_member  WHERE t.status = 'diambil'; |





1. Buatlah Stored Procedure untuk menampilkan id, tgl, status (tabel Transaksi), nama, alamat (table member), nama\_paket, jenis, harga (table Paket) dimana data transaksi tersebut memiliki status “PROSES”!

|  |
| --- |
| CREATE PROCEDURE `show\_paket\_proses` ()  BEGIN  SELECT t.id, t.tgl, t.status, m.nama, m.alamat, p.nama\_paket, p.jenis, p.harga FROM  tb\_detail\_transaksi d INNER JOIN tb\_paket p on d.id\_paket = p.id  INNER JOIN tb\_transaksi t on d.id\_transaksi = t.id  INNER JOIN tb\_member m on m.id = t.id\_member  WHERE t.status = 'proses';  END // |



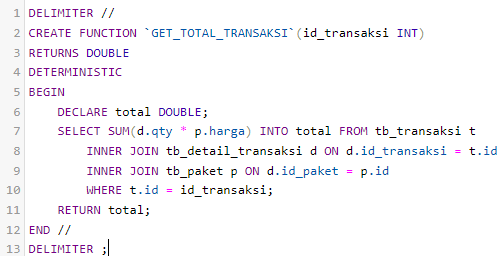
|  |
| --- |
| CALL PROCEDURE `show\_paket\_proses`; |





1. Buatlah function untuk menghasilkan total transaksi dengan parameter adalah id\_transaksi, dimana alur prosesna adalah dengan menjumlahkan harga per paket di kali dengan jumlah pakaian yang di ambil dari detail transaksi!

|  |
| --- |
| DELIMITER //  CREATE FUNCTION `GET\_TOTAL\_TRANSAKSI`(id\_transaksi INT)  RETURNS DOUBLE  DETERMINISTIC  BEGIN  DECLARE total DOUBLE;  SELECT SUM(d.qty \* p.harga) INTO total FROM tb\_transaksi t  INNER JOIN tb\_detail\_transaksi d ON d.id\_transaksi = t.id  INNER JOIN tb\_paket p ON d.id\_paket = p.id  WHERE t.id = id\_transaksi;  RETURN total;  END //  DELIMITER ; |



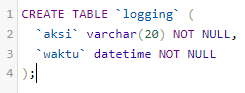
|  |
| --- |
| SELECT `GET\_TOTAL\_TRANSAKSI`(1); |

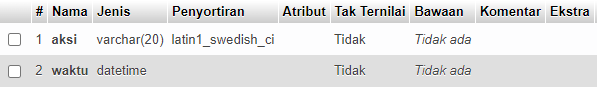




1. Buatlah table logging dengan field aksi typedata varchar(20), waktu typedata datetime

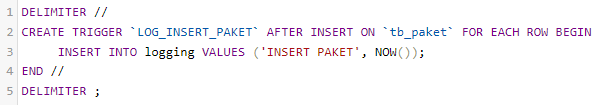
|  |
| --- |
| CREATE TABLE `logging` (  `aksi` varchar(20) NOT NULL,  `waktu` datetime NOT NULL  ); |



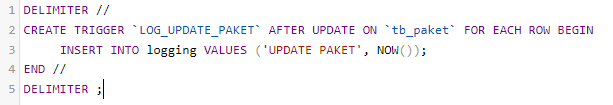


1. Buatlah 3 trigger untuk menginput pada table logging apabila ada kejadian insert, update dan delete pada table paket

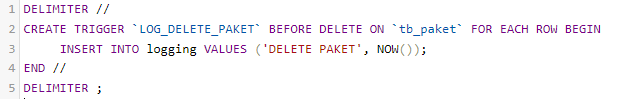
|  |
| --- |
| DELIMITER //  CREATE TRIGGER `LOG\_INSERT\_PAKET` AFTER INSERT ON `tb\_paket` FOR EACH ROW BEGIN  INSERT INTO logging VALUES ('INSERT PAKET', NOW());  END //  DELIMITER ; |



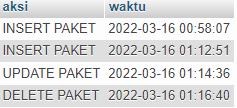
|  |
| --- |
| DELIMITER //  CREATE TRIGGER `LOG\_UPDATE\_PAKET` AFTER UPDATE ON `tb\_paket` FOR EACH ROW BEGIN  INSERT INTO logging VALUES ('UPDATE PAKET', NOW());  END //  DELIMITER ; |



|  |
| --- |
| DELIMITER //  CREATE TRIGGER `LOG\_DELETE\_PAKET` BEFORE DELETE ON `tb\_paket` FOR EACH ROW BEGIN  INSERT INTO logging VALUES ('DELETE PAKET', NOW());  END //  DELIMITER ; |

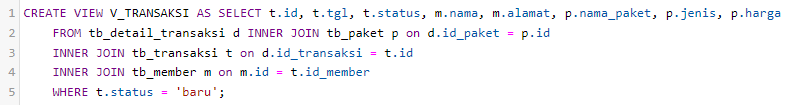






1. Buatlah view dengan nama v\_transaksi untuk menampilkan id, tgl, status (tabel Transaksi), nama, alamat (table member), nama\_paket, jenis, harga (table Paket) dimana data transaksi tersebut memiliki status “BARU”!

|  |
| --- |
| CREATE VIEW V\_TRANSAKSI AS SELECT t.id, t.tgl, t.status, m.nama, m.alamat, p.nama\_paket, p.jenis, p.harga  FROM tb\_detail\_transaksi d INNER JOIN tb\_paket p on d.id\_paket = p.id  INNER JOIN tb\_transaksi t on d.id\_transaksi = t.id  INNER JOIN tb\_member m on m.id = t.id\_member  WHERE t.status = 'baru'; |



|  |
| --- |
| SELECT \* FROM `v\_transaksi` |

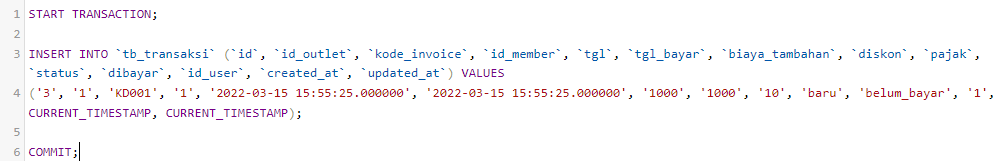




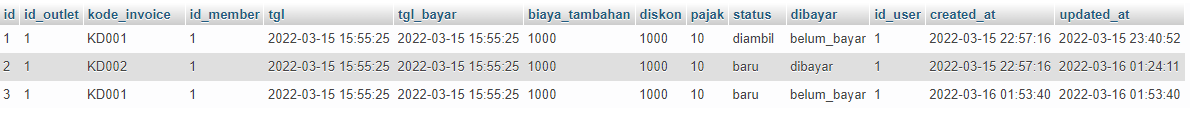
1. Buatlah perintah commit untuk aksi insert data pada tabel transaksi



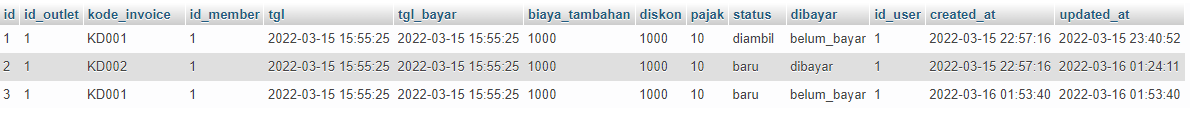
|  |
| --- |
| START TRANSACTION;  INSERT INTO `tb\_transaksi` (`id`, `id\_outlet`, `kode\_invoice`, `id\_member`, `tgl`, `tgl\_bayar`, `biaya\_tambahan`, `diskon`, `pajak`, `status`, `dibayar`, `id\_user`, `created\_at`, `updated\_at`) VALUES  ('3', '1', 'KD001', '1', '2022-03-15 15:55:25.000000', '2022-03-15 15:55:25.000000', '1000', '1000', '10', 'baru', 'belum\_bayar', '1', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP);  COMMIT; |



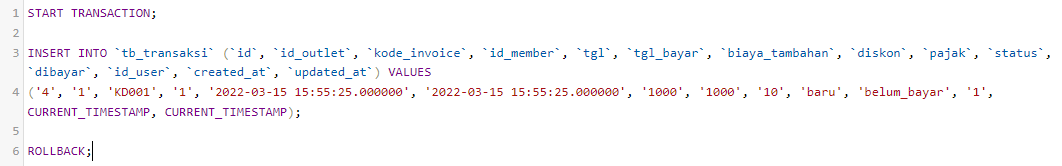


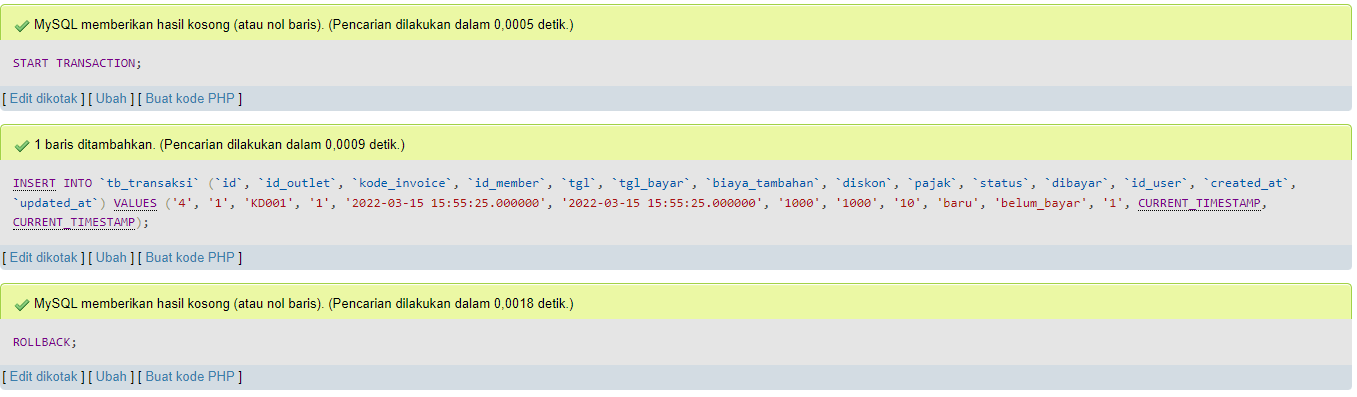


1. Buatlah perintah rollback untuk aksi insert pada tabel transaksi



|  |
| --- |
| START TRANSACTION;  INSERT INTO `tb\_transaksi` (`id`, `id\_outlet`, `kode\_invoice`, `id\_member`, `tgl`, `tgl\_bayar`, `biaya\_tambahan`, `diskon`, `pajak`, `status`, `dibayar`, `id\_user`, `created\_at`, `updated\_at`) VALUES  ('4', '1', 'KD001', '1', '2022-03-15 15:55:25.000000', '2022-03-15 15:55:25.000000', '1000', '1000', '10', 'baru', 'belum\_bayar', '1', CURRENT\_TIMESTAMP, CURRENT\_TIMESTAMP);  ROLLBACK; |



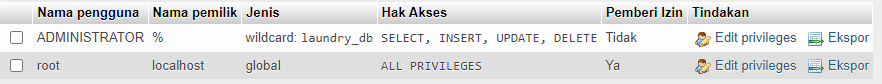




1. Buatlah user baru dengan nama ADMINISTRATOR dan password UJIKOM, berikan hakakses agar user dapat menggunakan fungsi select,insert,update,delete pada semua table di database laundry\_db

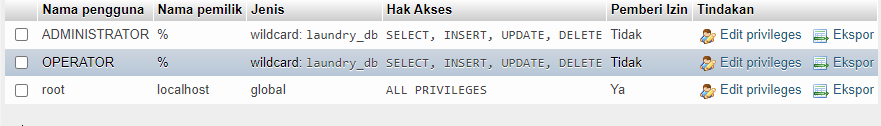
|  |
| --- |
| CREATE USER ADMINISTRATOR IDENTIFIED BY ‘UJIKOM’;  GRANT SELECT, INSERT, UPDATE, DELETE ON laundry\_db.\* TO ADMINISTRATOR; |





1. Buatlah user baru dengan nama OPERATOR dan password UJIKOM, cabut hak akses agar user tidak dapat menggunakan fungsi select,insert,update,delete pada table outlet dan paket di database laundry\_db

|  |
| --- |
| CREATE USER OPERATOR IDENTIFIED BY ‘UJIKOM’;  GRANT SELECT, INSERT, UPDATE, DELETE ON laundry\_db.\* TO OPERATOR; |



|  |
| --- |
| REVOKE SELECT, INSERT, UPDATE, DELETE ON laundry\_db.tb\_outlet TO OPERATOR;  REVOKE SELECT, INSERT, UPDATE, DELETE ON laundry\_db.tb\_member TO OPERATOR; |



1. Lakukan backup dan restore basis laundry\_db menggunakan dbms

|  |
| --- |
| mysqldump -u root -p laundry\_db > ./laundry\_db.sql |



|  |
| --- |
| mysql -u root -p laundry\_db2 < ./laundry\_db.sql |



