TUGAS KELOMPOK UJI KOMPETENSI BERBASIS INDUSTRI BIDANG SISTEM BASIS DATA

Kelompok : **99**
DMBS : **MariaDB**
Tema : **Aplikasi Order Coffee Shop**
Anggota Kelompok :

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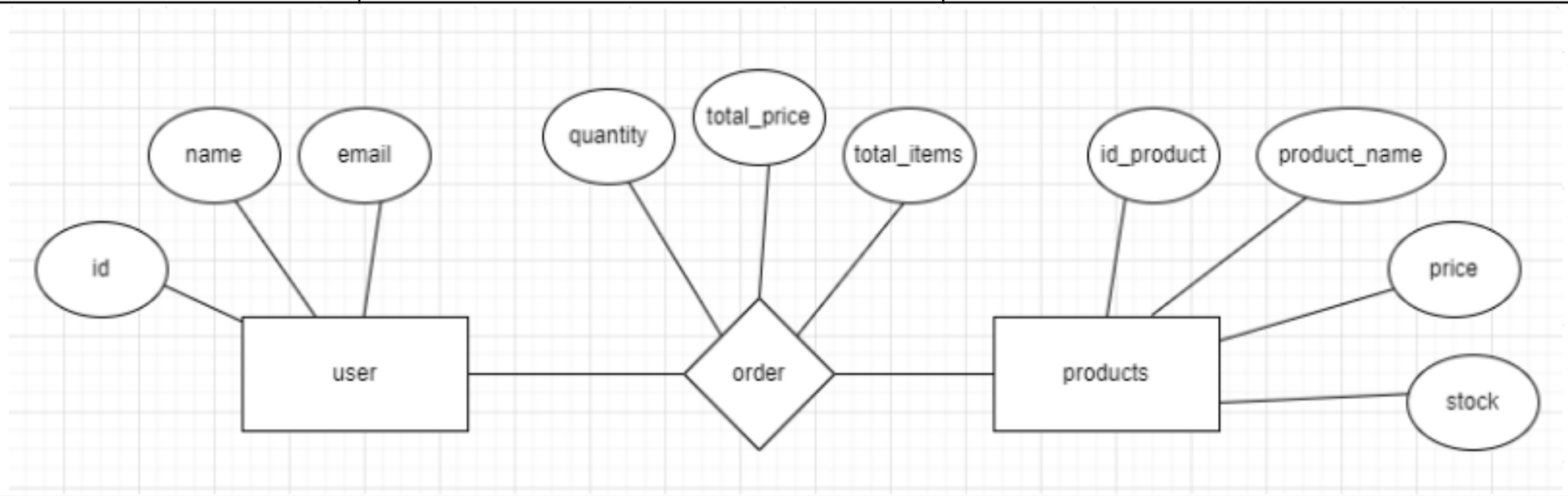
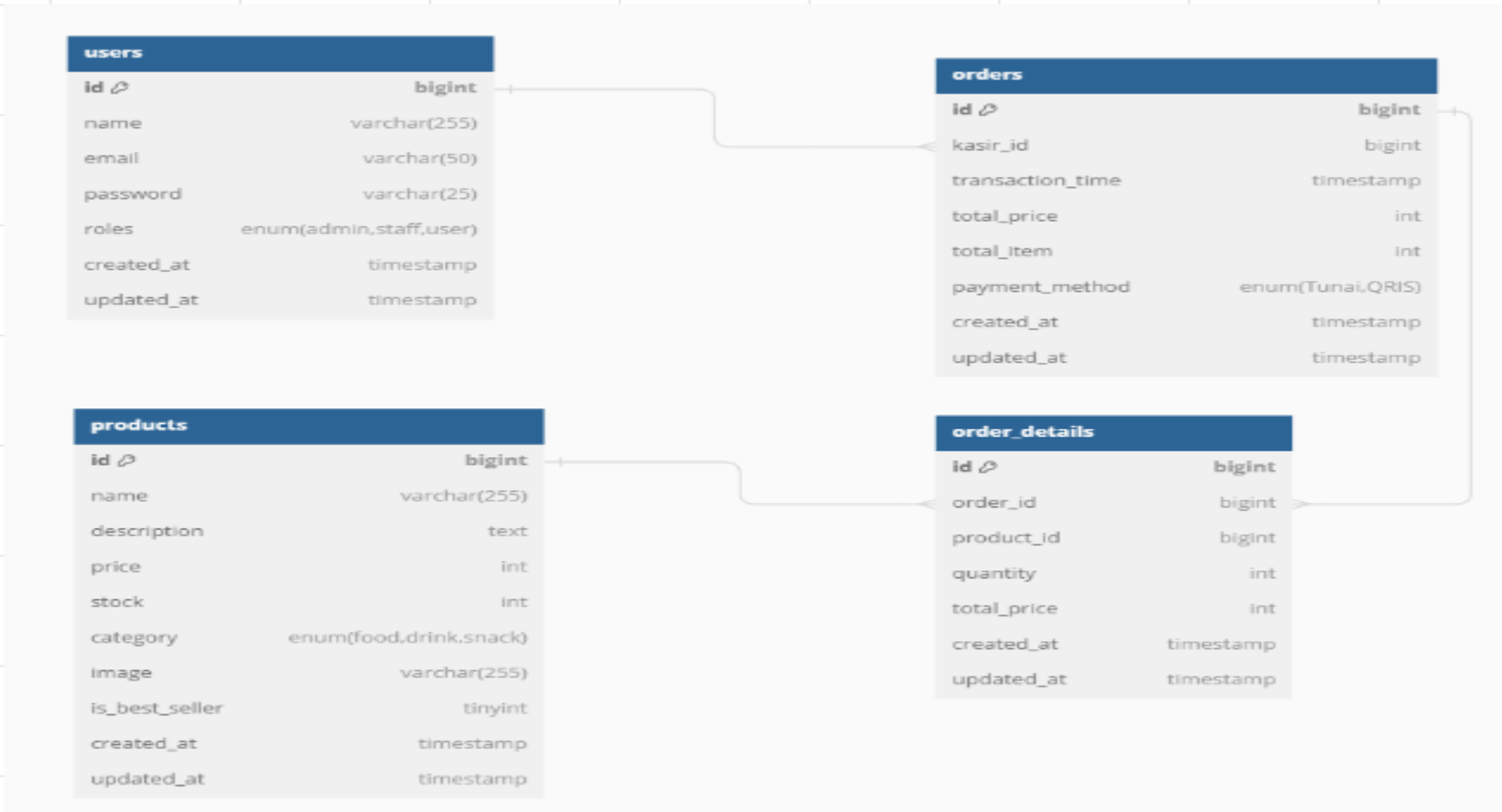
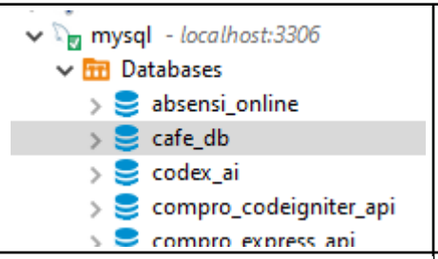
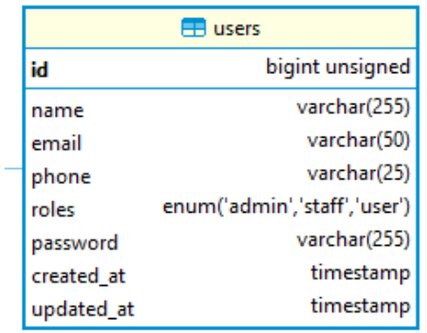
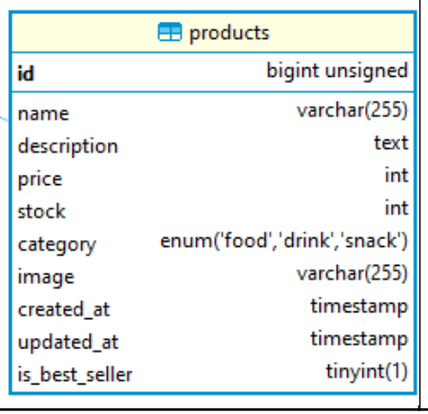
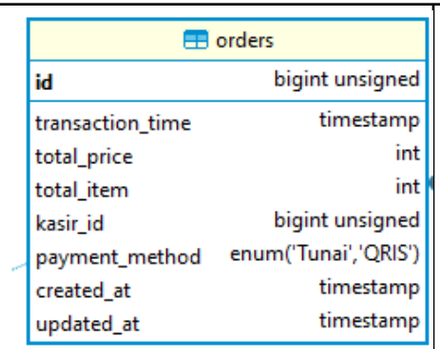
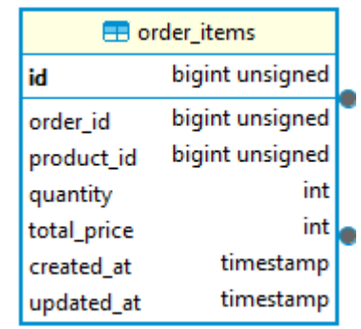
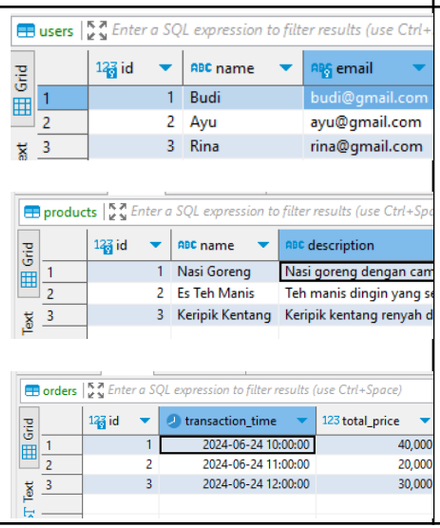
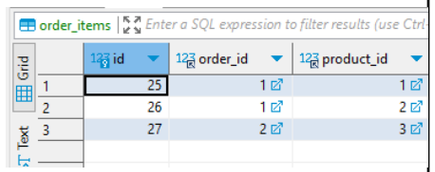
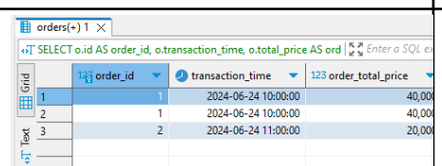
.oO Semoga Sukses Oo.

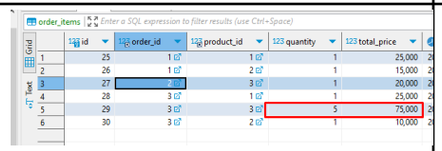
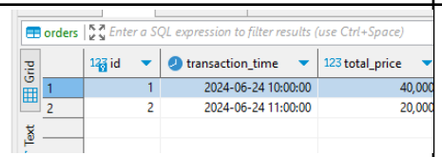
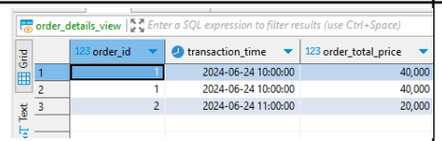
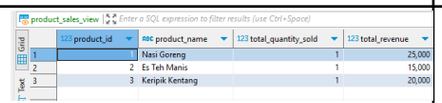
No	Nama Query	Hasil Gambar	Query Sql	Penjelasan Query
	ERD			

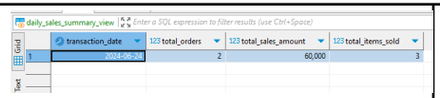
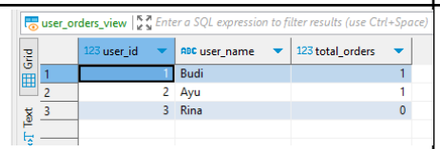
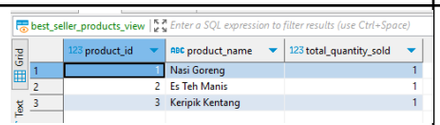
	ER			
No	**Nama Query**	**Hasil Gambar**	**Query Sql**	**Penjelasan Query**

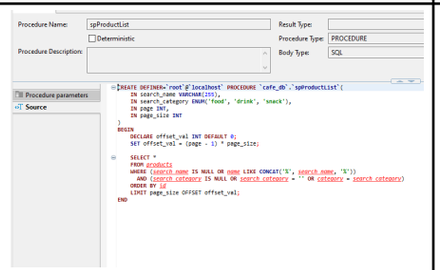
1	CREATE DATABASE		CREATE DATABASE cafe_db2; USE cafe_db;	Membuat database baru dan memilih database
2	CREATE TABLE		CREATE TABLE `users` (`id` bigint unsigned NOT NULL AUTO_INCREMENT, `name` varchar(255) NOT NULL, `email` varchar(50) NOT NULL, `phone` varchar(25) DEFAULT NULL, `roles` enum('admin','staff','user') NOT NULL DEFAULT 'user', `password` varchar(255) NOT NULL, `created_at` timestamp NULL DEFAULT NULL, `updated_at` timestamp NULL DEFAULT NULL, PRIMARY KEY (`id`), UNIQUE KEY `users_email_unique` (`email`));	Membuat Tabel users
3	CREATE TABLE		CREATE TABLE `products` (`id` bigint unsigned NOT NULL AUTO_INCREMENT, `name` varchar(255) NOT NULL, `description` text, `price` int NOT NULL DEFAULT '0', `stock` int NOT NULL DEFAULT '0', `category` enum('food','drink','snack') NOT NULL, `image` varchar(255) DEFAULT NULL, `created_at` timestamp NULL DEFAULT NULL, `updated_at` timestamp NULL DEFAULT NULL, `is_best_seller` tinyint(1) NOT NULL DEFAULT '0', PRIMARY KEY (`id`));	Membuat Tabel products

4	CREATE TABLE		CREATE TABLE `orders` (`id` bigint unsigned NOT NULL AUTO_INCREMENT, `transaction_time` timestamp NOT NULL, `total_price` int NOT NULL, `total_item` int NOT NULL, `kasir_id` bigint unsigned NOT NULL, `payment_method` enum('Tunai','QRIS') NOT NULL, `created_at` timestamp NULL DEFAULT NULL, `updated_at` timestamp NULL DEFAULT NULL, PRIMARY KEY (`id`), KEY `orders_kasir_id_foreign` (`kasir_id`), CONSTRAINT `orders_kasir_id_foreign` FOREIGN KEY (`kasir_id`) REFERENCES `users` (`id`));	Membuat Tabel orders
5	CREATE TABLE		CREATE TABLE `order_items` (`id` bigint unsigned NOT NULL AUTO_INCREMENT, `order_id` bigint unsigned NOT NULL, `product_id` bigint unsigned NOT NULL, `quantity` int NOT NULL, `total_price` int NOT NULL, `created_at` timestamp NULL DEFAULT NULL, `updated_at` timestamp NULL DEFAULT NULL, PRIMARY KEY (`id`), KEY `order_items_order_id_foreign` (`order_id`), KEY `order_items_product_id_foreign` (`product_id`), CONSTRAINT `order_items_order_id_foreign` FOREIGN KEY (`order_id`) REFERENCES `orders` (`id`), CONSTRAINT `order_items_product_id_foreign` FOREIGN KEY (`product_id`) REFERENCES `products` (`id`));	Membuat Tabel order_items
6	INSERT		INSERT INTO `users` (name, email, phone, roles, password, created_at, updated_at) VALUES ('Budi', 'budi@gmail.com', '085644445555', 'user', SHA2('budi123', 256), NOW(), NOW()), ('Ayu', 'ayu@gmail.com', '085655556666', 'user', SHA2('ayu123', 256), NOW(), NOW()), ('Rina', 'rina@gmail.com', '085666667777', 'user', SHA2('rina123', 256), NOW(), NOW()); INSERT INTO `products` (name, description, price, stock, category, image, created_at, updated_at, is_best_seller) VALUES ('Nasi Goreng', 'Nasi goreng dengan campuran sayuran dan daging ayam.', 25000, 50, 'food', 'nasi_goreng.jpg', NOW(), NOW(), 1), ('Es Teh Manis', 'Teh manis dingin yang segar.', 5000, 100, 'drink', 'es_teh_manis.jpg', NOW(), NOW(), 0),	Menambahkan data kedalam tabel users, products, orders dan order_items

			('Keripik Kentang', 'Keripik kentang renyah dengan rasa gurih.', 15000, 30, 'snack', 'keripik_kentang.jpg', NOW(), NOW(), 0); INSERT INTO `orders` (transaction_time, total_price, total_item, kasir_id, payment_method, created_at, updated_at) VALUES ('2024-06-24 10:00:00', 40000, 2, 1, 'Tunai', NOW(), NOW()), ('2024-06-24 11:00:00', 20000, 1, 2, 'QRIS', NOW(), NOW()), ('2024-06-24 12:00:00', 30000, 3, 1, 'Tunai', NOW(), NOW()); INSERT INTO `order_items` (order_id, product_id, quantity, total_price, created_at, updated_at) VALUES (1, 1, 1, 25000, NOW(), NOW()), (1, 2, 1, 15000, NOW(), NOW()); INSERT INTO `order_items` (order_id, product_id, quantity, total_price, created_at, updated_at) VALUES (2, 3, 1, 20000, NOW(), NOW()); INSERT INTO `order_items` (order_id, product_id, quantity, total_price, created_at, updated_at) VALUES (3, 1, 1, 25000, NOW(), NOW()), (3, 3, 1, 15000, NOW(), NOW()), (3, 2, 1, 10000, NOW(), NOW());	
7	SELECT		SELECT o.id AS *order_id*, o.transaction_time, o.total_price AS *order_total_price*, o.total_item AS *order_total_item*, u.name AS *kasir_name*, o.payment_method, p.name AS *product_name*, p.description AS *product_description*, p.price AS *product_price*, oi.quantity, oi.total_price AS *item_total_price* FROM order_items *oi* LEFT JOIN orders *o* ON *oi*.order_id = *o*.id LEFT JOIN users *u* ON *o*.kasir_id = *u*.id LEFT JOIN products *p* ON *oi*.product_id = *p*.id;	Menampilkan isi tabel order_details dan relasi ke tabel orders, users dan products

8	UPDATE		UPDATE order_items oi JOIN products p ON oi.product_id = p.id SET oi.quantity = 5, oi.total_price = 5 * p.price, oi.updated_at = NOW() WHERE oi.order_id = 3 AND oi.product_id = 3;	Merubah quantity=5 dan total_price pada tabel order_items yang berelasi ke tabel products
9	DELETE		DELETE FROM order_items WHERE order_id = 3; DELETE FROM orders WHERE id = 3;	Menghapus order_id=3 pada tabel orders dan order_items
10	CREATE VIEW		CREATE VIEW order_details_view AS SELECT a.id AS order_id, a.transaction_time, a.total_price AS order_total_price, a.total_item AS order_total_item, b.name AS kasir_name, a.payment_method, d.name AS product_name, d.description AS product_description, d.price AS product_price, c.quantity, c.total_price AS item_total_price FROM orders a LEFT JOIN users b ON a.kasir_id = b.id LEFT JOIN order_items c ON a.id = c.order_id LEFT JOIN products d ON c.product_id = d.id;	Membuat view yang isinya menampilkan data detail order
11	CREATE VIEW		CREATE VIEW product_sales_view AS SELECT p.id AS product_id, p.name AS product_name, SUM(oi.quantity) AS total_quantity_sold, SUM(oi.total_price) AS total_revenue FROM products p LEFT JOIN order_items oi ON p.id = oi.product_id GROUP BY p.id, p.name;	Membuat view yang isinya menampilkan data sales berdasarkan product

12	CREATE VIEW		CREATE VIEW daily_sales_summary_view AS SELECT DATE(a.transaction_time) AS transaction_date, COUNT(a.id) AS total_orders, SUM(a.total_price) AS total_sales_amount, SUM(a.total_item) AS total_items_sold FROM orders a GROUP BY DATE(a.transaction_time);	
13	CREATE VIEW		CREATE VIEW user_orders_view AS SELECT u.id AS user_id, u.name AS user_name, COUNT(o.id) AS total_orders FROM users u LEFT JOIN orders o ON u.id = o.kasir_id GROUP BY u.id, u.name;	
14	CREATE VIEW		CREATE VIEW best_seller_products_view AS SELECT p.id AS product_id, p.name AS product_name, SUM(oi.quantity) AS total_quantity_sold FROM products p LEFT JOIN order_items oi ON p.id = oi.product_id GROUP BY p.id, p.name ORDER BY SUM(oi.quantity) DESC;	

15	CREATE PROCEDURE		CREATE PROCEDURE `cafe_db`.`spProductList`(
			IN search_name VARCHAR(255),
			IN search_category ENUM('food', 'drink', 'snack'),
			IN page INT,
			IN page_size INT
			)
			BEGIN
			DECLARE offset_val INT DEFAULT 0;
			SET offset_val = (page - 1) * page_size;
			
			SELECT *
			FROM products
			WHERE (search_name IS NULL OR name LIKE CONCAT('%', search_name, '%'))
			AND (search_category IS NULL OR search_category = '' OR category = search_category)
			ORDER BY id
			LIMIT page_size OFFSET offset_val;
			END;	

16	CREATE PROCEDURE		CREATE PROCEDURE `cafe_db`.`spProductDetail`(
			  IN product_id BIGINT UNSIGNED
			)
			BEGIN
			  SELECT *
			  FROM products
			  WHERE id = product_id;
			END	

17	CREATE PROCEDURE		CREATE PROCEDURE `cafe_db`.`spProductAdd`(
			  IN p_name VARCHAR(255),
			  IN p_description TEXT,
			  IN p_price INT,
			  IN p_stock INT,
			  IN p_category ENUM('food', 'drink', 'snack'),
			  IN p_image VARCHAR(255)
			)
			BEGIN
			  DECLARE result_code INT;
			  DECLARE error_message VARCHAR(1000);
			  -- Check if name or category is empty
			  IF p_name = '' OR p_name IS NULL OR p_category = '' OR p_category IS NULL THEN
			  SET result_code = 39999;
			  SET error_message = 'Semua kolom (nama, kategori) harus diisi.';
			  SELECT result_code, error_message;
			  ELSE
			  -- Check if product name already exists
			  IF EXISTS (SELECT 1 FROM products WHERE name = p_name LIMIT 1) THEN
			  SET result_code = 39998;
			  SET error_message = 'Nama produk sudah ada dalam database.';
			  SELECT result_code, error_message;
			  ELSE
			  -- Insert new product
			  INSERT INTO products (name, description, price, stock, category, image, created_at, updated_at)
			  VALUES (p_name, p_description, p_price, p_stock, p_category, p_image, NOW(), NOW());
			  SET result_code = 1;
			  SET error_message = '';
			  SELECT result_code, error_message;
			  END IF;
			  END IF;
			END	

18	CREATE PROCEDURE		CREATE PROCEDURE `cafe_db`.`spProductEdit`(
			IN p_id BIGINT UNSIGNED,
			IN p_name VARCHAR(255),
			IN p_description TEXT,
			IN p_price INT,
			IN p_stock INT,
			IN p_category ENUM('food', 'drink', 'snack'),
			IN p_image VARCHAR(255)
			)
			begin
			DECLARE result_code INT;
			DECLARE error_message VARCHAR(1000);
			DECLARE product_count INT;
			-- Check if the product exists
			SELECT COUNT(*) INTO product_count
			FROM products
			WHERE id = p_id;
			IF product_count = 0 THEN
			SET result_code = 39999;
			SET error_message = 'Produk dengan ID yang diberikan tidak ditemukan.';
			SELECT result_code, error_message;
			ELSE
			IF p_name = '' OR p_name IS NULL OR p_category = '' OR p_category IS NULL THEN
			SET result_code = 39999;
			SET error_message = 'Semua kolom (nama, kategori) harus diisi.';
			SELECT result_code, error_message;
			ELSE
			UPDATE products
			SET name = p_name,
			description = p_description,
			price = p_price,
			stock = p_stock,
			category = p_category,
			image = p_image,
			updated_at = NOW()
			WHERE id = p_id;
			
			SET result_code = 1;
			SET error_message = '';
			SELECT result_code, error_message;
			END IF;
			END IF;
			END;	

19	CREATE PROCEDURE		CREATE PROCEDURE `cafe_db`.`spProductStockAdd`(
			IN p_product_id BIGINT UNSIGNED,
			IN p_add_stock INT
			)
			BEGIN
			DECLARE result_code INT;
			DECLARE error_message VARCHAR(1000);
			DECLARE current_stock INT;
			-- Check if the product exists
			IF NOT EXISTS (SELECT 1 FROM products WHERE id = p_product_id) THEN
			SET result_code = 0;
			SET error_message = 'Product ID does not exist';
			ELSE
			-- Get the current stock
			SELECT stock INTO current_stock FROM products WHERE id = p_product_id;
			-- Add the new stock
			UPDATE products SET stock = current_stock + p_add_stock, updated_at = NOW() WHERE id = p_product_id;
			SET result_code = 1;
			SET error_message = '';
			END IF;
			SELECT result_code, error_message;
			END	

20	RUN PROCEDURE		CALL spProductList('', null, 1, 10); CALL spProductList('', 'food', 1, 10); CALL spProductDetail(1); CALL spProductAdd(null, 'Deskripsi Produk', 10000, 50, 'food', 'gambar.jpg'); CALL spProductAdd('', 'Deskripsi Produk', 10000, 50, 'food', 'gambar.jpg'); CALL spProductAdd('Nama Produk2', 'Deskripsi Produk', 10000, 50, 'food', 'gambar.jpg'); CALL spProductEdit(12, '', 'Nama Produk', 12000, 60, 'drink', 'gambar_baru.jpg'); CALL spProductEdit(11, null, 'Deskripsi Produk Baru', 12000, 60, 'drink', 'gambar_baru.jpg'); CALL spProductEdit(11, '', 'Deskripsi Produk Baru', 12000, 60, 'drink', 'gambar_baru.jpg'); CALL spProductEdit(14, 'Nama Produk', 'Nama Produk', 12000, 60, 'drink', 'gambar_baru.jpg'); CALL spProductDelete(1); CALL spProductDelete(13);CALL spProductStockAdd(1, 10); CALL spProductStockAdd(1, 10);	

21	CREATE PROCEDURE		CREATE PROCEDURE `cafe_db`.`spOrderAdd`(IN p_transaction_time TIMESTAMP, IN p_total_price INT, IN p_total_item INT, IN p_kasir_id BIGINT UNSIGNED, IN p_payment_method ENUM('Tunai', 'QRIS')) begin DECLARE result_code INT; DECLARE error_message VARCHAR(1000); INSERT INTO orders (transaction_time, total_price, total_item, kasir_id, payment_method, created_at, updated_at) VALUES (p_transaction_time, p_total_price, p_total_item, p_kasir_id, p_payment_method, NOW(), NOW()); SET result_code = 1; SET error_message = ''; SELECT result_code, error_message; END	

22	CREATE PROCEDURE		CREATE PROCEDURE `cafe_db`.`spOrderItemAdd`(
			IN p_order_id BIGINT UNSIGNED,
			IN p_product_id BIGINT UNSIGNED,
			IN p_quantity INT,
			IN p_total_price INT
			)
			BEGIN
			DECLARE result_code INT;
			DECLARE error_message VARCHAR(1000);
			DECLARE product_stock INT;
			-- Check if the order exists
			IF NOT EXISTS (SELECT 1 FROM orders WHERE id = p_order_id) THEN
			SET result_code = 0;
			SET error_message = 'Order ID does not exist';
			
			-- Check if the product exists
			ELSEIF NOT EXISTS (SELECT 1 FROM products WHERE id = p_product_id) THEN
			SET result_code = 0;
			SET error_message = 'Product ID does not exist';
			
			-- Check if the stock is sufficient
			ELSE
			SELECT stock INTO product_stock FROM products WHERE id = p_product_id;
			IF product_stock < p_quantity THEN
			SET result_code = 0;
			SET error_message = 'Insufficient stock';
			ELSE	

			-- Insert the order item INSERT INTO order_items (order_id, product_id, quantity, total_price, created_at, updated_at) VALUES (p_order_id, p_product_id, p_quantity, p_total_price, NOW(), NOW()); -- Update the product stock UPDATE products SET stock = stock - p_quantity WHERE id = p_product_id; SET result_code = 1; SET error_message = ''; END IF; END IF; SELECT result_code, error_message; END	
23			CALL spOrderAdd('2024-06-24 14:00:00', 50000, 3, 1, 'Tunai'); CALL spOrderItemAdd(9,1, 1, 10000); CALL spProductStockAdd(1, 10);	

24	CREATE PROCEDURE		CREATE PROCEDURE `cafe_db`.`spRegister`(
			IN p_name VARCHAR(255),
			IN p_email VARCHAR(50),
			IN p_phone VARCHAR(25),
			IN p_roles ENUM('admin','staff','user'),
			IN p_password VARCHAR(255)
			)
			BEGIN
			DECLARE result_code INT;
			DECLARE error_message VARCHAR(1000);
			-- Check if the email already exists
			IF EXISTS (SELECT 1 FROM users WHERE email = p_email) THEN
			SET result_code = 0;
			SET error_message = 'Email already exists';
			ELSE
			-- Insert the new user with hashed password
			INSERT INTO users (name, email, phone, roles, password, created_at, updated_at)
			VALUES (p_name, p_email, p_phone, p_roles, SHA2(p_password, 256), NOW(), NOW());
			SET result_code = 1;
			SET error_message = '';
			END IF;
			SELECT result_code, error_message;
			END	

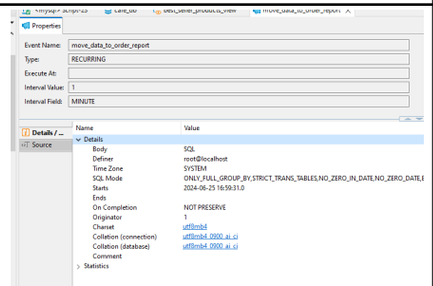
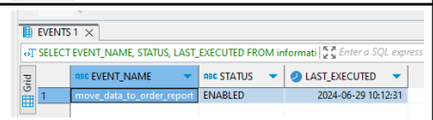
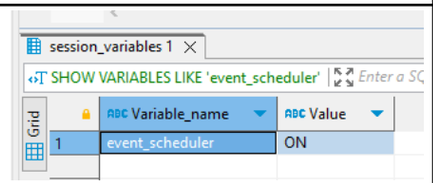
25	CREATE PROCEDURE		CREATE PROCEDURE `cafe_db`.`spLogin`(
			IN p_email VARCHAR(50),
			IN p_password VARCHAR(255)
			)
			BEGIN
			DECLARE result_code INT;
			DECLARE error_message VARCHAR(1000);
			DECLARE user_id BIGINT UNSIGNED;
			DECLARE user_name VARCHAR(255);
			DECLARE user_roles ENUM('admin','staff','user');
			-- Check if the email and hashed password match
			IF EXISTS (SELECT 1 FROM users WHERE email = p_email AND password = SHA2(p_password, 256)) THEN
			-- Get user details
			SELECT id, name, roles INTO user_id, user_name, user_roles FROM users WHERE email = p_email AND password = SHA2(p_password, 256);
			
			SET result_code = 1;
			SET error_message = '';
			
			SELECT result_code, error_message;
			SELECT user_id, user_name, user_roles;
			ELSE
			SET result_code = 0;
			SET error_message = 'Invalid email or password';
			SELECT result_code, error_message;
			END IF;
			
			END	

26	RUN PROCEDURE		select * from users; CALL spRegister('John Doe', 'johndoe@example.com', '123456789', 'user', 'budi123'); CALL spLogin('johndoe@example.com', 'budi123');	
27	CREATE TRIGGER		CREATE TRIGGER trg_after_insert_order_items AFTER INSERT ON order_items FOR EACH ROW BEGIN CALL spOrderTotalUpdate(NEW.order_id); END	

28	CREATE TRIGGER		CREATE TRIGGER trg_after_update_order_items AFTER UPDATE ON order_items FOR EACH ROW BEGIN CALL spOrderTotalUpdate(NEW.order_id); END	
29	CREATE TRIGGER		CREATE TRIGGER trg_after_delete_order_items AFTER DELETE ON order_items FOR EACH ROW BEGIN CALL spOrderTotalUpdate(OLD.order_id); END	

30	CREATE TABLE		CREATE TABLE order_report (
			   order_id BIGINT UNSIGNED NOT NULL,
			   transaction_time TIMESTAMP NOT NULL,
			   order_total_price INT NOT NULL,
			   order_total_item INT NOT NULL,
			   kasir_name VARCHAR(255) NOT NULL,
			   payment_method ENUM('Tunai', 'QRIS') NOT NULL,
			   product_name VARCHAR(255) NOT NULL,
			   product_description TEXT,
			   product_price INT NOT NULL,
			   quantity INT NOT NULL,
			   item_total_price INT NOT NULL,
			   INDEX idx_transaction_time (transaction_time),
			   INDEX idx_kasir_name (kasir_name),
			   INDEX idx_payment_method (payment_method),
			   INDEX idx_product_name (product_name)
			);	

31	CREATE PROCEDURE		CREATE PROCEDURE`cafe_db`.`spOrderReportAdd`()
			BEGIN
			     -- Insert data into order_report if it doesn't already exist
			   INSERT INTO order_report (
			       order_id,
			       transaction_time,
			       order_total_price,
			       order_total_item,
			       kasir_name,
			       payment_method,
			       product_name,
			       product_description,
			       product_price,
			       quantity,
			       item_total_price
			   )	

			SELECT v.order_id, v.transaction_time, v.order_total_price, v.order_total_item, v.kasir_name, v.payment_method, v.product_name, v.product_description, v.product_price, v.quantity, v.item_total_price FROM cafe_db.order_details_view v WHERE NOT EXISTS (SELECT 1 FROM order_report r WHERE r.order_id = v.order_id AND r.product_name = v.product_name AND r.quantity = v.quantity); END	
32	CREATE EVENT		CREATE EVENT IF NOT EXISTS move_data_to_order_report ON SCHEDULE EVERY 1 MINUTE STARTS CURRENT_TIMESTAMP ON COMPLETION NOT PRESERVE ENABLE DO CALL spOrderReportAdd();	
33	SELECT		SELECT EVENT_NAME, STATUS, LAST_EXECUTED FROM information_schema.EVENTS WHERE EVENT_SCHEMA = 'cafe_db' AND EVENT_NAME = 'move_data_to_order_report';	
34	SET GLOBAL		SET GLOBAL event_scheduler = ON; SHOW VARIABLES LIKE 'event_scheduler'; SELECT NOW();	

.oO Semoga Sukses Oo.