1. a Table User

```
CREATE TABLE `nisa`.`user` (
`id` INT NOT NULL,
`username` VARCHAR(45) NULL,
`password` VARCHAR(45) NULL,
`created_at` DATETIME NULL,
`updated_at` DATETIME NULL,
PRIMARY KEY (`user_id`));
```

b. Table Product

```
CREATE TABLE `nisa`.`product` (
`id` INT NOT NULL AUTO_INCREMENT,
`product_name` VARCHAR(45) NULL,
`price` INT NULL,
`created_at` DATETIME NULL,
`updated_at` DATETIME NULL,
PRIMARY KEY (`id`));
```

c. Table Transaction Product

```
CREATE TABLE `nisa`.`transaction_product` (
`id` INT NOT NULL,
`transaction_id` INT NULL,
`product_id` INT NULL,
`quantity` INT NULL,
PRIMARY KEY (`id`));
```

d. Table Transaction

```
CREATE TABLE `nisa`.`transaction` (
`id` INT NOT NULL,
`user_id` INT NULL,
`total_price` INT NULL,
`created_at` DATETIME NULL,
`updated_at` DATETIME NULL,
PRIMARY KEY (`id`));
```

2. ALTER TABLE `nisa`.`user` ADD PRIMARY KEY (`id`)

ALTER TABLE `nisa`.`product` ADD PRIMARY KEY (`id`)

ALTER TABLE `nisa`.`transaction_product` ADD PRIMARY KEY (`id`)

ALTER TABLE `nisa`.`transaction` ADD PRIMARY KEY (`id`)

ALTER TABLE `nisa`.`transaction_product` ADD CONSTRAINT `product_link` FOREIGN KEY (`product_id`) REFERENCES `nisa`.`product` (`id`)

ALTER TABLE `nisa`.`transaction` ADD CONSTRAINT `transaction_link` FOREIGN KEY (`id`) REFERENCES `nisa`.`transaction_product` (`transaction_id`)

ALTER TABLE `nisa`.`transaction` ADD CONSTRAINT `user_link` FOREIGN KEY (`user_id`) REFERENCES `nisa`.`user` (`id`)

3. a. INSERT INTO `nisa`.`user` (`id`, `username`, `password`, `created_at`, `updated_at`) VALUES ('1', 'andi', 'andi123', '2022-08-27', '2022-08-27');

INSERT INTO `nisa`.`user` (`id`, `username`, `password`, `created_at`, `updated_at`) VALUES ('2', 'budi', 'budi_ganteng999', '2022-08-27', '2022-08-27');

b. INSERT INTO `nisa`.`product` (`id`, `product_name`, `price`, `created_at`, `updated_at`) VALUES ('1', 'baju', '67000', '2022-08-17', '2022-08-17');

INSERT INTO `nisa`.`product` (`id`, `product_name`, `price`, `created_at`, `updated_at`) VALUES ('2', 'celana', '86000', '2022-08-18', '2022-08-18');

INSERT INTO `nisa`.`product` (`id`, `product_name`, `price`, `created_at`, `updated_at`) VALUES ('3', 'buku', '24000', '2022-08-19', '2022-08-19');

INSERT INTO `nisa`.`product` (`id`, `product_name`, `price`, `created_at`, `updated_at`) VALUES ('4', 'sepatu', '128000', '2022-08-20', '2022-08-20');

INSERT INTO `nisa`.`product` (`id`, `product_name`, `price`, `created_at`, `updated_at`) VALUES ('5', 'sepeda', '1500000', '2022-08-21', '2022-08-21');

INSERT INTO `nisa`.`product` (`id`, `product_name`, `price`, `created_at`, `updated_at`) VALUES ('6', 'bola', '17000', '2022-08-22', '2022-08-22');

INSERT INTO `nisa`.`product` (`id`, `product_name`, `price`, `created_at`, `updated_at`) VALUES ('7', 'komputer', '8956000', '2022-08-23', '2022-08-23');

INSERT INTO `nisa`.`product` (`id`, `product_name`, `price`, `created_at`, `updated_at`) VALUES ('8', 'gelas', '96400', '2022-08-24', '2022-08-24');

c. INSERT INTO `nisa`.`transaction_product` (`id`, `transaction_id`, `product_id`, `quantity`) VALUES ('1', '1', '1', '2');

INSERT INTO `nisa`.`transaction_product` (`id`, `transaction_id`, `product_id`, `quantity`) VALUES ('2', '1', '2', '3');

INSERT INTO `nisa`.`transaction_product` (`id`, `transaction_id`, `product_id`, `quantity`) VALUES ('3', '2', '7', '1');

INSERT INTO `nisa`.`transaction_product` (`id`, `transaction_id`, `product_id`, `quantity`) VALUES ('4', '2', '4', '1');

INSERT INTO `nisa`.`transaction_product` (`id`, `transaction_id`, `product_id`, `quantity`) VALUES ('5', '3', '2', '4');

INSERT INTO `nisa`.`transaction_product` (`id`, `transaction_id`, `product_id`, `quantity`) VALUES ('6', '3', '3', '4');

INSERT INTO `nisa`.`transaction_product` (`id`, `transaction_id`, `product_id`, `quantity`) VALUES ('7', '4', '8', '2');

INSERT INTO `nisa`.`transaction_product` (`id`, `transaction_id`, `product_id`, `quantity`) VALUES ('8', '4', '4', '2');

d. INSERT INTO `nisa`.`transaction` (`id`, `user_id`, `total_price`, `created_at`, `updated_at`) VALUES ('1', '1', '392000', '2022-08-15', '2022-08-15');

INSERT INTO `nisa`.`transaction` (`id`, `user_id`, `total_price`, `created_at`, `updated_at`) VALUES ('2', '2', '9084000', '2022-08-15', '2022-08-15');

INSERT INTO `nisa`.`transaction` (`id`, `user_id`, `total_price`, `created_at`, `updated_at`) VALUES ('3', '2', '440000', '2022-08-16', '2022-08-16');

INSERT INTO `nisa`.`transaction` (`id`, `user_id`, `total_price`, `created_at`, `updated_at`) VALUES ('4', '1', '448800', '2022-08-16', '2022-08-16');

e. UPDATE transaction_product SET quantity = '1' WHERE id = any(Select TP.id from

user AS U JOIN transaction AS T ON U.id = T.user_id

JOIN transaction_product AS TP ON T.id = TP.transaction_id

JOIN product AS P ON P.id = TP.product_id

WHERE U.username = 'andi' AND P.product_name = 'gelas');

f. DELETE FROM product WHERE price=(SELECT min(price) AS price from product);

4. Select * from product where price > 50000 order by product_name asc LIMIT 3,6

5. a. select U.username, sum(TP.quantity) FROM user AS U join transaction AS T on U.id = T.user_id

join transaction_product AS TP on T.id = TP.transaction_id GROUP BY U.username

b. SELECT product_name, sum(quantity) AS jumlah FROM transaction_product AS TP JOIN product AS P ON TP.product_id = P.id

GROUP BY product_name ORDER BY jumlah desc;