

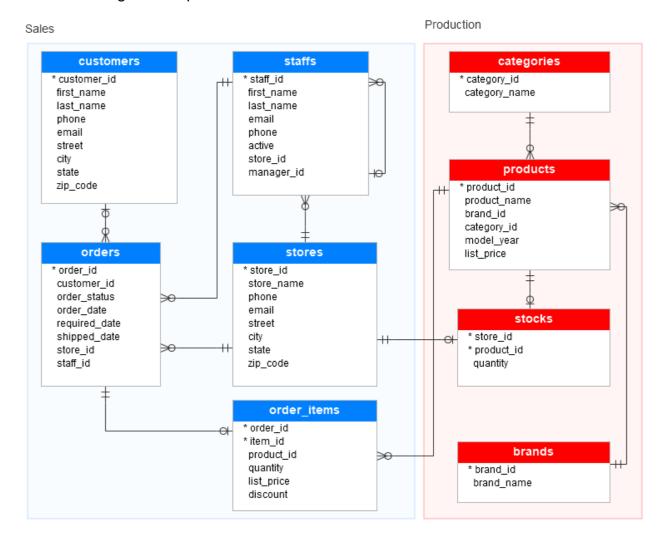
# POLITEKNIK NEGERI MALANG JURUSAN TEKNOLOGI INFORMASI



Jl. Soekarno Hatta No.9 Malang 65141 Telp (0341) 404424 – 404425 Fax (0341) 404420 Laman://www.polinema.ac.id Email:cs@polinema.ac.id

# QUIZ 1 DATABASE CARRY ON (Case study Shop Bicycle)

Shop Fast is shop Which sell all type bicycle. Picture under This is design drawing database diagram Shop Fast





# POLITEKNIK NEGERI MALANG JURUSAN TEKNOLOGI INFORMASI



Jl. Soekarno Hatta No.9 Malang 65141 Telp (0341) 404424 – 404425 Fax (0341) 404420 Laman://www.polinema.ac.id Email:cs@polinema.ac.id

## **DETAIL DATABASE**

## Table sales, stores

The sales.stores table contains store information. Each store has a store name, store information, contact like telephone And e-mail, And address including road, city, country part, And code post. The following details source code to make sales.stores table

```
CREATE TABLE sales.stores (
    store_id INT IDENTITY (1, 1) PRIMARY KEY,
    store_name VARCHAR (255) NOT NULL,
    phone VARCHAR (25),
    email VARCHAR (255),
    street VARCHAR (255),
    city VARCHAR (255),
    state VARCHAR (10),
    zip_code VARCHAR (5)
);
```

### Table sales, staffs

sales.staffs table store important information of staff including first name, Name back. This Also containing information communication like e-mail And telephone. A staff Work in shop Which determined by mark in column store\_id. A shop can have one or more staff. A staff reports to the store manager who determined by mark in column manager\_id. If mark in manager\_id is null, so staff is play a role as top manager. If staff No Again Work For storage wherever, mark in column active in set to mark zero/zero.

Following This details source code For make table sales.staffs

```
CREATE TABLE sales.staffs (

staff_id INT IDENTITY (1, 1) PRIMARY KEY,

first_name VARCHAR (50) NOT NULL,

last_name VARCHAR (50) NOT NULL,

email VARCHAR (255) NOT NULL UNIQUE,

phone VARCHAR (25),

active tinyint NOT NULL,

store_id INT NOT NULL,

manager_id INT,

FOREIGN KEY (store_id)

REFERENCES sales.stores (store_id)

ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY (manager_id)

REFERENCES sales.staffs (staff_id)

ON DELETE NO ACTION ON UPDATE NO ACTION
);
```



# POLITEKNIK NEGERI MALANG JURUSAN TEKNOLOGI INFORMASI



Jl. Soekarno Hatta No.9 Malang 65141 Telp (0341) 404424 – 404425 Fax (0341) 404420 Laman://www.polinema.ac.id Email:cs@polinema.ac.id

## **Table production.brands**

**Table production.brands** keep data about information brand bicycle for example Electra, Hello, and Heller. Following This details source code For make table production.brands

```
CREATE TABLE production.brands (

brand_id INT IDENTITY (1, 1) PRIMARY KEY,

brand_name VARCHAR (255) NOT NULL
);
```

# **Table production.products**

**production.products table** store product information such as name, brand, category, model year, and price list. Each product belongs to a specified brand. by the **brand\_id column**. Therefore, a brand may have zero or many products. Each product also falls into a category defined by the column **category\_id**. Additionally, each category may have zero or many products. Following This details source code for make table production.products

```
CREATE TABLE production.products (

product_id INT IDENTITY (1, 1) PRIMARY KEY,

product_name VARCHAR (255) NOT NULL,

brand_id INT NOT NULL,

category_id INT NOT NULL,

model_year SMALLINT NOT NULL,

list_price DECIMAL (10, 2) NOT NULL,

FOREIGN KEY (category_id)

REFERENCES production.categories (category_id)

ON DELETE CASCADE ON UPDATE CASCADE,

FOREIGN KEY (brand_id)

REFERENCES sales.brands (brand_id)

ON DELETE CASCADE ON UPDATE CASCADE
```



# POLITEKNIK NEGERI MALANG JURUSAN TEKNOLOGI INFORMASI



Jl. Soekarno Hatta No.9 Malang 65141 Telp (0341) 404424 – 404425 Fax (0341) 404420 Laman://www.polinema.ac.id Email:cs@polinema.ac.id

#### Table sales.customers

**Table sales.customers** keep information table customer including Name first, last name, phone, email, street, city, country and zip code. Here are details source code to make table sales.customers

```
CREATE TABLE sales.customers (
    customer_id INT IDENTITY (1, 1) PRIMARY KEY,
    first_name VARCHAR (255) NOT NULL,
    last_name VARCHAR (255) NOT NULL,
    phone VARCHAR (25),
    email VARCHAR (255) NOT NULL,
    street VARCHAR (255),
    city VARCHAR (50),
    state VARCHAR (25),
    zip_code VARCHAR (5)
);
```

## Table sales.orders

Table sales.orders keep information Header order sale This including customer, order status, order date, required date, shipped date. This is also stores information on where the sales transaction was made (store) and who made it. make it (staff). Every order sale own line in table sales\_orders. Order sale own One or Lots Items line Which savedin table sales.order\_items. Following This details source code For make table sales.orders



# POLITEKNIK NEGERI MALANG JURUSAN TEKNOLOGI INFORMASI



Jl. Soekarno Hatta No.9 Malang 65141 Telp (0341) 404424 – 404425 Fax (0341) 404420 Laman://www.polinema.ac.id Email:cs@polinema.ac.id

```
CREATE TABLE sales.orders (
        order_id INT IDENTITY (1, 1) PRIMARY KEY,
        customer_id INT,
        order_status tinyint NOT NULL,
        -- Order status: 1 = Pending; 2 = Processing; 3 = Rejected; 4 = Completed
        order date DATE NOT NULL.
       required_date DATE NOT NULL,
       shipped_date DATE,
        store_id INT NOT NULL,
        staff id INT NOT NULL,
       FOREIGN KEY (customer_id)
        REFERENCES sales.customers (customer_id)
        ON DELETE CASCADE ON UPDATE CASCADE,
        FOREIGN KEY (store_id)
        REFERENCES sales.stores (store_id)
        ON DELETE CASCADE ON UPDATE CASCADE,
        FOREIGN KEY (staff id)
        REFERENCES sales.staffs (staff_id)
        ON DELETE NO ACTION ON UPDATE NO ACTION
);
```

#### Table sales.orders items

Table sales.order\_items keep Items line from order sale. Every Items line belongs to the sales order specified by the order\_id column. The order line item sales include products, order quantities, selling prices, and discounts. The following details source code For create table sales.orders\_items



# POLITEKNIK NEGERI MALANG JURUSAN TEKNOLOGI INFORMASI



Jl. Soekarno Hatta No.9 Malang 65141 Telp (0341) 404424 – 404425 Fax (0341) 404420 Laman://www.polinema.ac.id Email:cs@polinema.ac.id

# **Table production.stocks**

production.stocks stores inventory information, namely the quantity of a particular product in stock.shop certain. Following this is the detail source code for make table production.stocks

```
CREATE TABLE production.stocks (
    store_id INT,
    product_id INT,
    quantity INT,
    PRIMARY KEY (store_id, product_id),
    FOREIGN KEY (store_id)
    REFERENCES sales.stores (store_id)
    ON DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (product_id)
    REFERENCES production.products (product_id)
    ON DELETE CASCADE ON UPDATE CASCADE
);
```

#### **Task**

1. Please run the query source code on file number two to your SQL Server. This source code functioning For make database shop bicycle with details Which Already explained in the previous explanation.

```
Capture hasil running source setup yang terbentuk contoh
MYYOGA (SQL Server 15.0.2070.41 - MYYOG

    ■ Databases

⊞ ■ Database Diagrams

☐ I Tables
   ⊞ ≡ FileTables
   🖽 🔳 Graph Tables

    ⊞ production.brands

   \blacksquare production.products
```



# POLITEKNIK NEGERI MALANG JURUSAN TEKNOLOGI INFORMASI



Jl. Soekarno Hatta No.9 Malang 65141 Telp (0341) 404424 – 404425 Fax (0341) 404420 Laman://www.polinema.ac.id Email:cs@polinema.ac.id

2. Please insert 1 new data in **the sales.customers table** where the details are Name, number telephone, And e-mail equated with data self You. Capture source code And results insert You

Copy/paste source TSQL You here

Capture data results insert You here

3. Show all over column from **table sales.customers** with provision letter beginning in Name front they The same with Name front You Then sort based on the largest customer\_id first and display only 10 top data. Capture source code and results SELECT You

## Example results:



Copy/paste source TSQL You here

Capture results running TSQL You

4. Write it down order SELECT between 2 table. Show column product\_id, product\_name, list\_price from the production.products table and category name columnfrom table production.categories. Change it appearance Name the column so that column product\_id become id\_product, product\_name become product name, category\_name becomes category, list\_price becomes price. The data displayed is a product that has a price greater than or equal to 1000 and sort by smallest product id. Please do it using order **JOIN**.



# POLITEKNIK NEGERI MALANG JURUSAN TEKNOLOGI INFORMASI



Jl. Soekarno Hatta No.9 Malang 65141 Telp (0341) 404424 – 404425 Fax (0341) 404420 Laman://www.polinema.ac.id Email:cs@polinema.ac.id

# Example results:

id_produk	nama_produk	kategori	harga
4	Trek Fuel EX 8 29 - 2016	Mountain Bikes	2899.99
5	Heller Shagamaw Frame - 2016	Mountain Bikes	1320.99
7	Trek Slash 8 27.5 - 2016	Mountain Bikes	3999.99
8	Trek Remedy 29 Carbon Frameset - 2016	Mountain Bikes	1799.99
9	Trek Conduit+ - 2016	Electric Bikes	2999.99
10	Surly Straggler - 2016	Cyclocross Bicycles	1549.00
11	Surly Straggler 650b - 2016	Cyclocross Bicycles	1680.99
28	Surly Karate Monkey 27.5+ Frameset - 2017	Mountain Bikes	2499.99
31	Surly Wednesday - 2017	Mountain Bikes	1632.99
	20		

...etc

Copy/paste source TSQL You here

Capture results running TSQL You

5. Based on question number 4 Please show data after 7 line First Andshow only 9 data only

Example results:

d_produk	nama_produk	kategori	harga
28	Surly Karate Monkey 27.5+ Frameset - 2017	Mountain Bikes	2499.99
31	Surly Wednesday - 2017	Mountain Bikes	1632.99
39	Trek Stache 5 - 2017	Mountain Bikes	1499.99
40	Trek Fuel EX 9.8 29 - 2017	Mountain Bikes	4999.99
41	Haro Shift R3 - 2017	Mountain Bikes	1469.99
42	Trek Fuel EX 5 27.5 Plus - 2017	Mountain Bikes	2299.99
43	Trek Fuel EX 9.8 27.5 Plus - 2017	Mountain Bikes	5299.99
46	Haro SR 1.3 - 2017	Mountain Bikes	1409.99
47	Trek Remedy 9.8 - 2017	Mountain Bikes	5299.99

Copy/paste source TSQL You here

Capture results running TSQL You