Nama Peserta: Priscilla Gabriela

Kode Peserta: 002 (FSDO001ONL002)

Tugas : Assignment 2

Buat sebuah database Bank dan tentunya dokumentasikan setiap query yang anda buat di dalamnya dengan memasukkan setiap record pada setiap tabel.

- 1. Nomor 1
 - a. Soal

Create database Bank

b. Jawaban query

CREATE database Bank;

- 2. Nomor 2
 - a. Soal

Create tabel customers => stores data customer

b. Jawaban query

```
CREATE table Customers(
      customerNumber varchar(10) primary key,
      customerName varchar(100),
      contactLastName varchar(50),
      contactFirstName varchar(50),
      phone varchar(13),
      addressLine1 varchar(100),
      addressLine2 varchar(100),
      city varchar(50),
      state varchar(50),
      postalCode varchar(5),
      country varchar(50),
      salesRepEmployeeNumber varchar(10),
      creditLimit int
)
ALTER TABLE Customers
ADD CONSTRAINT fk_customers_employee
FOREIGN KEY (salesRepEmployeeNumber) REFERENCES Employee(employeeNumber);
```

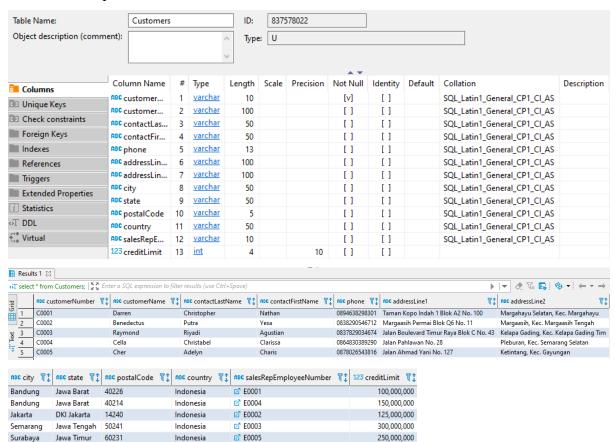
INSERT

Customers(customerNumber,customerName,contactLastName,contactFirstName,phone,addressLine1,addressLine2,city,state,postalCode,country,salesRepEmployeeNumber,creditLimit)

VALUES('C0001', 'Darren', 'Christopher', 'Nathan', '0894638298301', 'Taman Kopo Indah 1 Blok A2 No. 100', 'Margahayu Selatan, Kec. Margahayu', 'Bandung', 'Jawa Barat', '40226', 'Indonesia', 'E0001', 100000000),

('C0002','Benedectus','Putra','Yesa','0838290546712','Margaasih Permai Blok 11', 'Margaasih, Tengah', 'Bandung', 'Jawa No. Kec. Margaasih Barat','40214','Indonesia','E0004',150000000), ('C0003','Raymond','Riyadi','Agustian','0837829034674','Jalan Boulevard Blok C No. 43', 'Kelapa Gading, Raya Kec. Kelapa Gading Tim', 'Jakarta', 'DKI Jakarta', '14240', 'Indonesia', 'E0002', 125000000), ('C0004','Cella','Christabel','Clarissa','0864830389290','Jalan Pahlawan No. 28', 'Pleburan, Selatan', 'Semarang', 'Jawa Semarang Tengah', '50241', 'Indonesia', 'E0003', 300000000), ('C0005','Cher','Adelyn','Charis','0878026543816','Jalan Ahmad Yani 127', 'Ketintang, Gayungan', 'Surabaya', 'Jawa Timur', '60231', 'Indonesia', 'E0005', 250000000);

c. Screenshot output



3. Nomor 3

a. Soal

Create tabel products => stores daftar/list model product (dalam hal ini bisa mobil/motor dll)

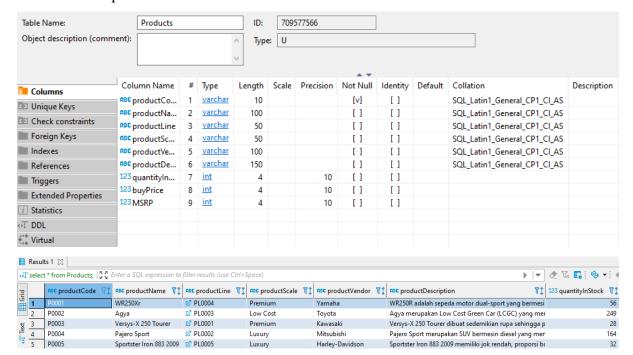
b. Jawaban query

```
CREATE table Products(
    productCode varchar(10) primary key,
    productName varchar(100),
    productLine varchar(50),
    productScale varchar(50),
    productVendor varchar(100),
    productDescription varchar(150),
```

```
quantityInStock int,
      buyPrice int,
      MSRP int
)
ALTER TABLE Products
ADD CONSTRAINT fk_products_productlines
FOREIGN KEY (productLine) REFERENCES Productlines(productLine);
TNSFRT
                                                                        INTO
Products(productCode, productName, productLine, productScale, productVendor, pro
ductDescription,quantityInStock,buyPrice,MSRP)
VALUES('P0001','WR250Xr','PL0004','Premium','Yamaha','WR250R adalah sepeda
motor dual-sport yang bermesin 250cc dan didukung bahan bakar premium
berpendingin
                  cairan,
                                           diumpankan
                                                           bahan
                                                                       bakar
                                yang
premium',56,80000000,92800000),
('P0002','Agya','PL0003','Low Cost','Toyota','Agya merupakan Low Cost Green
Car (LCGC) yang menawarkan tampilan yang modern, lincah dan irit bahan
bakar',249,116000000,124000000),
('P0003','Versys-X 250 Tourer','PL0001','Premium','Kawasaki','Versys-X 250
Tourer dibuat sedemikian rupa sehingga pengendara tetap tegak dan nyaman
dalam perjalanan',28,50000000,54600000),
                     Sport', 'PL0002', 'Luxury', 'Mitsubishi', 'Pajero
('P0004','Pajero
                                                                       Sport
merupakan SUV bermesin diesel yang memiliki tampilan atraktif dan tenaga yang
besar',164,780000000,835000000),
('P0005','Sportster
                                   883
                                            2009', 'PL0005', 'Luxury', 'Harley-
                         Iron
Davidson', 'Sportster Iron 883 2009 memiliki jok rendah, proporsi body kecil
```

c. Screenshot output

dan desain yang simple',32,165000000,178000000);



123 buyPrice	T:	123 MSRP	T:
80,000,0	000	92,800,	000
116,000,	000	124,000,	000
50,000,	000	54,600,	000
780,000,	000	835,000,	000
165,000,	000	178,000,	000

a. Soal

Create tabel productlines => stores daftar/list kategori product

b. Jawaban query

```
CREATE table Productlines(
    productLine varchar(50) primary key,
    textDescription varchar(150),
    htmlDescription varchar(150),
    image varchar(100)
)
```

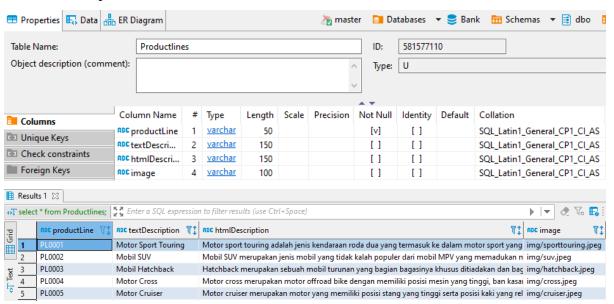
INSERT INTO Productlines(productLine,textDescription,htmlDescription,image)
VALUES('PL0001','Motor Sport Touring','Motor sport touring adalah jenis
kendaraan roda dua yang termasuk ke dalam motor sport yang mengutamakan
kenyamanan berkendara','img/sporttouring.jpeg'),

('PL0002', 'Mobil SUV', 'Mobil SUV merupakan jenis mobil yang tidak kalah populer dari mobil MPV yang memadukan mobil jeep dan mobil sedan', 'img/suv.jpeg'),

('PL0003','Mobil Hatchback','Hatchback merupakan sebuah mobil turunan yang bagian bagasinya khusus ditiadakan dan bagian belakangnya dibentuk seperti MPV','img/hatchback.jpeg'), ('PL0004','Motor Cross','Motor cross merupakan motor offroad bike dengan

('PL0004','Motor Cross','Motor cross merupakan motor offroad bike dengan memiliki posisi mesin yang tinggi, ban kasar yang dikhususkan untuk melibas medan berat','img/cross.jpeg'),

('PL0005', 'Motor Cruiser', 'Motor cruiser merupakan motor yang memiliki posisi stang yang tinggi serta posisi kaki yang relatif ke depan yang mempunyai posisi kursi rendah', 'img/cruiser.jpeg');

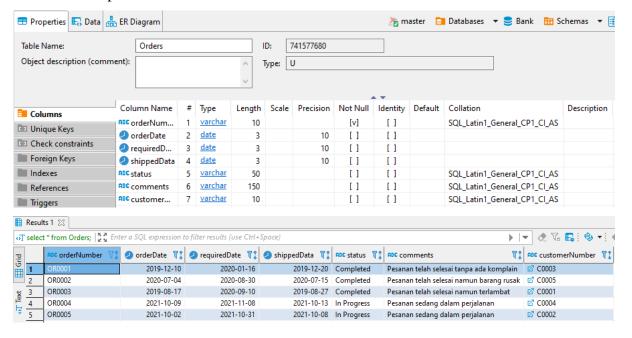


a. Soal

Create tabel orders => store order sales oleh customer

b. Jawaban query

```
CREATE table Orders(
      orderNumber varchar(10) primary key,
      orderDate Date,
      requiredDate Date,
      shippedData Date,
      status varchar(50),
      comments varchar(150),
      customerNumber varchar(10)
)
ALTER TABLE Orders
ADD CONSTRAINT fk_orders_customers
FOREIGN KEY (customerNumber) REFERENCES Customers(customerNumber);
                                                                           INTO
INSERT
Orders(orderNumber,orderDate,requiredDate,shippedData,status,comments,custo
merNumber)
VALUES('OR0001','12-10-2019','01-16-2020','12-20-2019','Completed','Pesanan
telah selesai tanpa ada komplain', 'C0003'),
('OR0002','07-04-2020','08-30-2020','07-15-2020','Completed','Pesanan telah
selesai namun barang rusak', 'C0005'),
('OR0003','08-17-2019','09-10-2020','08-27-2019','Completed','Pesanan telah
selesai namun terlambat','C0001'),
('OR0004','10-09-2021','11-08-2021','10-13-2021','In
                                                            Progress', 'Pesanan
sedang dalam perjalanan','C0004'),
('OR0005','10-02-2021','10-31-2021','10-08-2021','In
                                                            Progress', 'Pesanan
sedang dalam perjalanan','C0002');
```

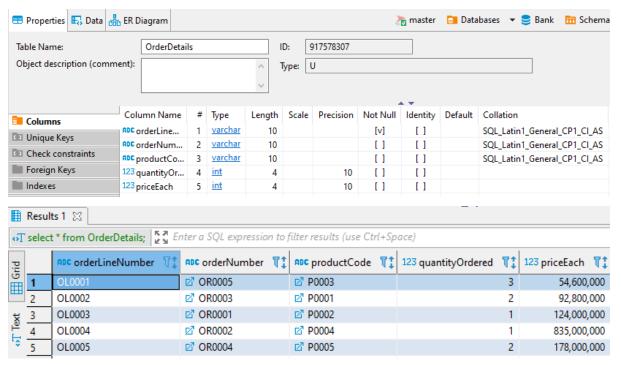


a. Soal

Create tabel orderdetails => store item order sales dalam setiap order sales

b. Jawaban query

```
CREATE table OrderDetails(
       orderLineNumber varchar(10) primary key,
       orderNumber varchar(10),
        productCode varchar(10),
        quantityOrdered int,
        priceEach int
)
ALTER TABLE OrderDetails
ADD CONSTRAINT fk_orderdetails_orders
FOREIGN KEY (orderNumber) REFERENCES Orders(orderNumber);
ALTER TABLE OrderDetails
ADD CONSTRAINT fk_orderdetails_products
FOREIGN KEY (productCode) REFERENCES Products(productCode);
                                                                                         INTO
OrderDetails(orderLineNumber,orderNumber,productCode,quantityOrdered,priceE
ach)
VALUES('OL0001','OR0005','P0003',3,54600000),
('OL0002','OR0003','P0001',2,92800000),
('OL0003','OR0001','P0002',1,124000000),
('OL0004','OR0002','P0004',1,835000000),
('OL0005','OR0004','P0005',2,1780000000);
```

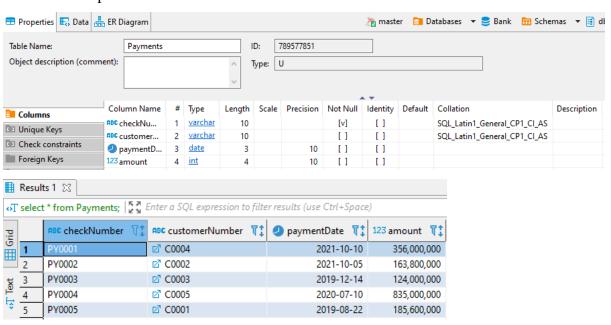


a. Soal

Create tabel payments => store pembayaran oleh customer sesuai dengan akun pembayaran

b. Jawaban query

c. Screenshot output



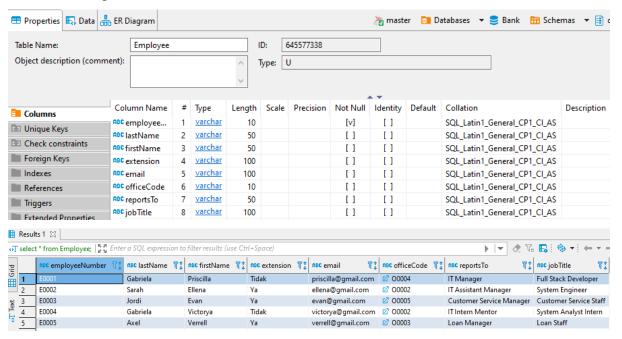
8. Nomor 8

a. Soal

Create tabel employee => store informasi karyawan dalam sebuah organisasi struktur

b. Jawaban query

```
CREATE table Employee(
       employeeNumber varchar(10) primary key,
       lastName varchar(50),
       firstName varchar(50),
       extension varchar(100),
       email varchar(100),
       officeCode varchar(10),
       reportsTo varchar(50),
       jobTitle varchar(100)
)
ALTER TABLE Employee
ADD CONSTRAINT fk_employee_offices
FOREIGN KEY (officeCode) REFERENCES Offices(officeCode);
INSERT
                                                                                  INTO
Employee(employeeNumber,lastName,firstName,extension,email,officeCode,repor
tsTo, jobTitle)
VALUES('E0001', 'Gabriela', 'Priscilla', 'Tidak', 'priscilla@gmail.com', '00004'
,'IT Manager','Full Stack Developer'),
('E0002','Sarah','Ellena','Ya','ellena@gmail.com','00002','IT
Manager','System Engineer'),
('E0003','Jordi','Evan','Ya','evan@gmail.com','00005','Customer
                                                                            Assistant
                                                                              Service
Manager','Customer Service Staff'),
('E0004','Gabriela','Victorya','Tidak','victorya@gmail.com','00002','IT
Intern Mentor', 'System Analyst Intern'),
('E0005', 'Axel', 'Verrell', 'Ya', 'verrell@gmail.com', '00003', 'Loan
Manager','Loan Staff');
```

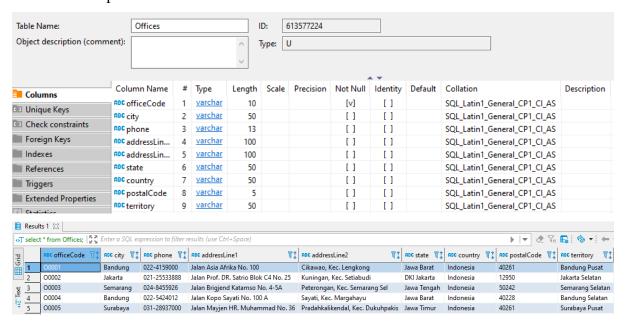


a. Soal

Create tabel offices => store data sales office

b. Jawaban query

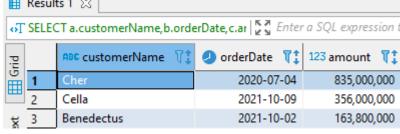
```
CREATE table Offices(
       officeCode varchar(10) primary key,
       city varchar(50),
       phone varchar(13),
       addressLine1 varchar(100),
       addressLine2 varchar(100),
       state varchar(50),
       country varchar(50),
       postalCode varchar(5),
       territory varchar(50)
)
INSERT
                                                                              INTO
Offices(officeCode,city,phone,addressLine1,addressLine2,state,country,posta
1Code,territory)
VALUES('00001', 'Bandung', '022-4159000', 'Jalan Asia Afrika No. 100', 'Cikawao,
Kec. Lengkong', 'Jawa Barat','Indonesia','40261','Bandung Pusat'),
('00002','Jakarta','021-25533888','Jalan Prof. DR. Satrio Blok
25', 'Kuningan, Kec. Setiabudi', 'DKI Jakarta', 'Indonesia', '12950', 'Jakarta
Selatan'),
('00003','Semarang','024-8455926','Jalan
                                                Brigjend
                                                                                4-
                                                             Katamso
                                                                         No.
                                                                              'Jawa
5A', 'Peterongan,
                           Kec.
                                                             Sel',
Tengah', 'Indonesia', '50242', 'Semarang Selatan'), ('00004', 'Bandung', '022-5424012', 'Jalan Kopo Sayati No. 100 A', 'Sayati, Kec.
Margahayu', 'Jawa Barat', 'Indonesia', '40228', 'Bandung Selatan'),
('00005', 'Surabaya', '031-28937000', 'Jalan
                                                Mayjen
                                                                  Muhammad
                                                                               No.
36', 'Pradahkalikendal,
                                                                     Dukuhpakis',
'Surabaya', 'Indonesia', '40261', 'Surabaya Pusat');
```



- 10. Join dan subquery (improve)
 - Select customerName, orderDate, amount dari customer yang order date nya antara 01-01-2020 dan 12-31-2021

```
SELECT a.customerName,b.orderDate,c.amount FROM Customers a JOIN Orders b
ON a.customerNumber = b.customerNumber
JOIN Payments c
ON b.customerNumber = c.customerNumber
WHERE b.orderDate BETWEEN '01-01-2020' AND '12-31-2021';

### Results 1 
### Results 1 
### Enter a SQL expression t
```



b. Select firstName, territory dari employee yang territory nya mengandung kata 'Selatan'

```
SELECT a.firstName,b.territory from Employee a JOIN Offices b
ON a.officeCode = b.officeCode
WHERE b.territory like '%Selatan%';
```



c. Select customerName, creditLimit, amount dari customer yang memiliki limit kredit melebihi rata-rata keseluruhan limit kredit

```
SELECT a.customerName,a.creditLimit,b.amount FROM Customers a JOIN Payments
b
ON a.customerNumber = b.customerNumber
WHERE a.creditLimit >
    (SELECT AVG(creditLimit)
    FROM Customers);
```

