



CSIS05I

Database systems II

Lab (1)

GENERAL REVISION-SOLUTIONS

Lab (1) Solutions

Exercises:

1- Create Store database:

```
CREATE DATABASE Store;
```

2- The creation of all the tables within the Store database:

```
CREATE TABLE Customer
```

```
(  
  CustomerID      INT              NOT NULL,  
  CustFirstName   VARCHAR(30),  
  CustLastName    VARCHAR(30),  
  CustomerDOB     VARCHAR(30),  
  CustomerPhone   VARCHAR(30),  
  CustomerAddress VARCHAR(30),
```

```
CONSTRAINT Customer_pk PRIMARY KEY (CustomerID)
```

```
);
```

```
CREATE TABLE Order
```

```
(  
  OrderID      INT              NOT NULL,  
  CID          INT              NOT NULL,  
  DateOfOrder   VARCHAR(30),  
  OrderStatus   VARCHAR(30),
```

```
CONSTRAINT Order_pk PRIMARY KEY (OrderID),
```

```
CONSTRAINT Customer_Order_fk  
FOREIGN KEY (CID) REFERENCES Customer (CustomerID)  
);
```

```
CREATE TABLE Product  
(  
  PID                INT                NOT NULL,  
  
  PName              VARCHAR(20),  
  
  PDescription        VARCHAR(30),  
  
  CONSTRAINT Product_pk PRIMARY KEY (PID)  
);
```

```
CREATE TABLE Order_details  
(  
  OrderID            INT                NOT NULL,  
  ProductID          INT                NOT NULL,  
  Quantity           INT,  
  
  CONSTRAINT Orderdetails_pk PRIMARY KEY (OrderID, ProductID),  
  
  CONSTRAINT Order_Product_fk FOREIGN KEY (OrderID) REFERENCES Order  
  (OrderID),  
  
  CONSTRAINT Product_Order_fk FOREIGN KEY (ProductID) REFERENCES  
  Product (PID)  
);
```

3- Insert 3 rows for each of the following relations:

a. Customer

INSERT INTO Customer VALUES ('1', 'Mark', 'Smith', '26/01/1993', '01001589678', 'New Cairo');

INSERT INTO Customer VALUES ('2', 'Marhia', 'John', '14/05/1990', '05454784328', 'Montana');

INSERT INTO Customer VALUES ('3', 'Steven', 'Branden', '18/12/1960', '021654125845', 'New Jersey');

b. Order

INSERT INTO Order VALUES ('101', '1', '26/7/2019', 'Delivered');

INSERT INTO Order VALUES ('102', '2', '26/8/2019', 'Delivered');

INSERT INTO Order VALUES ('103', '3', '26/9/2019', 'NotDelivered');

c. Product

INSERT INTO Product VALUES('201', 'TV', 'Smart TV');

INSERT INTO Product VALUES('202', 'Camera', 'Sony Camera');

INSERT INTO Product VALUES('203', 'Mobile', 'Iphone11');

d. Order_details

INSERT INTO Order_details VALUES('101', '201', '10');

INSERT INTO Order_details VALUES('102', '202', '5');

INSERT INTO Order_details VALUES('103', '203', '15');

- 4- Retrieve all the customers information

```
SELECT *  
FROM Customer;
```

- 5- Retrieve the products name, ID and its quantity

```
SELECT PID, PName, Quantity  
FROM Product, Order_Details  
WHERE Product.PID = Order_Details.ProductID;
```

- 6- Retrieve all the Customers ID and First Name that have their order delivered.

```
SELECT CustomerID, CustFirstName, OrderID ,OrderStatus  
FROM Customer , Order  
WHERE CustomerID=CID AND OrderStatus='Delivered';
```

Or

```
SELECT CustomerID, CustFirstName, OrderID , OrderStatus  
FROM Customer JOIN Order  
ON CustomerID=CID  
WHERE OrderStatus='Delivered';
```