By Alnafis
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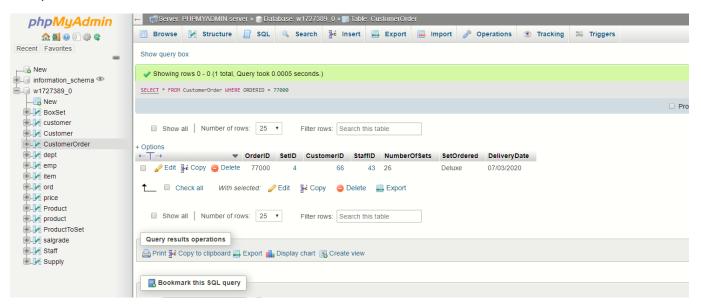| Entity | Primary key (PK) | Foreign Key (FK) | Rationale for PK |
|---|---|---|---|
| Customer | CustomerID | N/A | CustomerID is unique to each Customer |
| CustomerOrder | OrderID | SetID CustomerID StaffID | Customer Order is unique to each order |
| Supply | SupplyID | N/A | SupplyID is unique to each Supply |
| Product | ProductID | SupplyID | ProductID is unique to each Product |
| ProductToSet | psID | ProductID SetID | PSID is unique to each Product to Set |
| BoxSet | SetID | N/A | SetID is unique to each Set |
| Staff | StaffID | N/A | StaffID is Unique to each staff |

| Query no | purpose | Tables involved | SQL | Correct execution |
|---|---|---|---|---|
| 1 | To open the staff table and show the FirstName column in the alphabetically order. | 1 table - Staff | SELECT FirstName FROM Staff ORDER BY FirstName | yes |
| 2 | To open the customer order table and show the number of sets column in the order of ascending | 1 table - CustomerOrder | SELECT NumberOfSets FROM CustomerOrder ORDER BY NumberOfSets ASC | yes |
| 3 | To open the customer order table and select any information that matches '77000' from the order id table. | 1 table - CustomerOrder | SELECT * FROM CustomerOrder WHERE ORDERID = 77000 | yes |
| 4 | To open the customer table and select First name column and show the result that matches the Clout avenue address. | 1 table - Customer | SELECT FirstName FROM Customer WHERE Address = 'Clout Avenue' | yes |



Query no:1
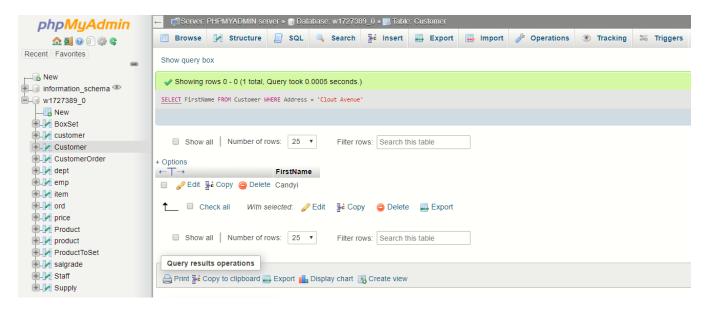
Query no:2



Query no:3

Query no:4

# SQL script file – Table Creation

**CREATE   TABLE Customer**

**(**

        **CustomerID                    INTEGER(20),**

        **Email                VARCHAR(100) NOT NULL,**

        **FirstName                    VARCHAR(50) NOT NULL,**

        **SecondName                    VARCHAR(50) NOT NULL,**

        **CustomerTelNo     VARCHAR(25) NOT NULL,**

        **CustomerType      VARCHAR(20) NOT NULL,**

        **Address                    VARCHAR(30) NOT NULL,**

        **CONSTRAINT c_cid_pk PRIMARY KEY (CustomerID)**

**);**


**CREATE   TABLE CustomerOrder**

**(**

        **OrderID              INTEGER(20),**

        **SetID              INTEGER(20),**

        **CustomerID                    INTEGER(20),**

```
        StaffID                     INTEGER(20),

        NumberOfSets     VARCHAR(50) NOT NULL,

        SetOrdered                  VARCHAR(50) NOT NULL,

        DeliveryDate        VARCHAR(50) NOT NULL,

        CONSTRAINT c_oid_pk PRIMARY KEY (OrderID),

        CONSTRAINT c_sid_fk FOREIGN KEY (SetID) REFERENCES BoxSet (SetID),

        CONSTRAINT c_cid_fk FOREIGN KEY (CustomerID) REFERENCES Customer (CustomerID),

        CONSTRAINT c_stid_fk FOREIGN KEY (StaffID) REFERENCES Staff (StaffID)
);


CREATE   TABLE Supply
(
        SupplyID            INTEGER(15),

        SupplierName    VARCHAR(25) NOT NULL,

        CONSTRAINT s_sid_pk PRIMARY KEY (SupplyID)
);




CREATE   TABLE Product
(
        ProductID                   INTEGER(20),

        SupplyID            INTEGER(20),

        ProductName                 VARCHAR(15) NOT NULL,

        Description                 VARCHAR(30) NOT NULL,

        CONSTRAINT p_pid_pk PRIMARY KEY (ProductID),

        CONSTRAINT p_Sid_fk FOREIGN KEY (SupplyID) REFERENCES Supply (SupplyID)
);


CREATE   TABLE ProductToSet
(
        psID                        INTEGER(20),

        ProductID                   INTEGER(20),
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```
        SetID                   INTEGER(20),

        CONSTRAINT ps_psid_pk PRIMARY KEY (psID),

        CONSTRAINT ps_pid_fk FOREIGN KEY (ProductID) REFERENCES Product (ProductID),

        CONSTRAINT ps_sid_fk FOREIGN KEY (SetID) REFERENCES BoxSet (SetID)

);


CREATE   TABLE BoxSet

(

        SetID                   INTEGER(20),

        Price                   VARCHAR(5) NOT NULL,

        Description             VARCHAR(60) NOT NULL,

        SetName                 VARCHAR(20) NOT NULL,

        CONSTRAINT s_sid_pk PRIMARY KEY (SetID)

);


CREATE   TABLE Staff

(

        StaffID         INTEGER(15),

        Email                   VARCHAR(50) NOT NULL,

        FirstName               VARCHAR(50) NOT NULL,

        SecondName              VARCHAR(50) NOT NULL,

        StaffTelNo              VARCHAR(25) NOT NULL,

        CONSTRAINT s_sid_pk PRIMARY KEY (StaffID)

);
```

## SQL Script Inserted into Database

**///Customer///**

**INSERT INTO**

**Customer (CustomerID, Email, FirstName, SecondName, CustomerTelNo, CustomerType, Address)**

**VALUES (022, 'candyi@gmail.com', 'Land', 0738384848, 'Corporate Client', 'Clout Avenue');**

**INSERT INTO**

**Customer (CustomerID, Email, FirstName, SecondName, CustomerTelNo, CustomerType, Address)**

**VALUES (033, 'John@gmail.com', 'Jonh', 'Son', 0756384648, 'Young Professional', 'Newland Avenue');**


**INSERT INTO**

**Customer (CustomerID, Email, FirstName, SecondName, CustomerTelNo, CustomerType, Address)**

**VALUES (053, 'riley@gmail.com', 'Riley', 'Rid', 0718344545, 'Corporate Client', 'Lake Avenue');**


**INSERT INTO**

**Customer (CustomerID, Email, FirstName, SecondName, CustomerTelNo, CustomerType, Address)**

**VALUES (066, 'bob@gmail.com', 'Bob', 'Martin', 0728374848, 'Young Professional', 'NewYork Avenue');**

**\\\**


**///CustomerOrder///**

**INSERT INTO**

**CustomerOrder (OrderID, SetID, CustomerID, StaffID, NumberOfSets, SetOrdered, DeliveryDate)**

**VALUES (08000, 001, 22, 046, 20, 'Regular', '20/02/2020');**


**INSERT INTO**

**CustomerOrder (OrderID, SetID, CustomerID, StaffID, NumberOfSets, SetOrdered, DeliveryDate)**

**VALUES (04500, 003, 33, 045, 5, 'Deluxe', '30/08/2020');**


**INSERT INTO**

**CustomerOrder (OrderID, SetID, CustomerID, StaffID, NumberOfSets, SetOrdered, DeliveryDate)**

**VALUES (34000, 002, 53, 044, 10, 'Regular', '10/01/2020');**


**INSERT INTO**

**CustomerOrder (OrderID, SetID, CustomerID, StaffID, NumberOfSets, SetOrdered, DeliveryDate)**

**VALUES (77000, 004, 66, 043, 26, 'Deluxe', '07/03/2020');**

**\\\**

**///BoxSet///**

**INSERT INTO**

**BoxSet (SetID, Price, Description, Setname)**

**VALUES (001, 25.99, 'Affordable', 'Regular Care')**


**INSERT INTO**

**BoxSet (SetID, Price, Description, Setname)**

**VALUES (002, 25.99, 'Affordable', 'Regular Care')**


**INSERT INTO**

**BoxSet (SetID, Price, Description, Setname)**

**VALUES (003, 650, 'High Range', 'Deluxe Re-creation')**


**INSERT INTO**

**BoxSet (SetID, Price, Description, Setname)**

**VALUES (004, 650, 'High Range', 'Deluxe Re-creation')**


**\\\**

**///Staff///**


**INSERT INTO**

**Staff (StaffID, Email, FirstName, SecondName, StaffTelNo)**

**VALUES (046, 'Justin@gmail.com', 'Justin', 'Khan', 0788493098);**


**INSERT INTO**

**Staff (StaffID, Email, FirstName, SecondName, StaffTelNo)**

**VALUES (045, 'Chris@gmail.com', 'Chris', 'Lin', 0712393098);**


**INSERT INTO**

**Staff (StaffID, Email, FirstName, SecondName, StaffTelNo)**

**VALUES (044, 'Ian@gmail.com', 'Ian', 'Joerge', 0784593067);**


**INSERT INTO**

**Staff (StaffID, Email, FirstName, SecondName, StaffTelNo)**

**VALUES (043, 'Lin@gmail.com', 'Lin', 'Da', 0703945739);**


**\\\**


**///ProductToSet///**


**INSERT INTO**

**ProductToSet (psID, ProductID, SetID)**

**VALUES (3782, 2020, 001)**


**INSERT INTO**

**ProductToSet (psID, ProductID, SetID)**

**VALUES (3992, 2010, 002)**


**INSERT INTO**

**ProductToSet (psID, ProductID, SetID)**

**VALUES (3642, 2040, 003)**


**INSERT INTO**

**ProductToSet (psID, ProductID, SetID)**

**VALUES (3148, 2030, 004)**

**\\\**


**///Product///**


**INSERT INTO**

**Product (ProductID , SupplyID, ProductName, Description)**

**VALUES (2010, 3030, 'Shampoo', 'Soft and Clean')**


**INSERT INTO**

**Product (ProductID , SupplyID, ProductName, Description)**

**VALUES (2020, 4430, 'fragnance', 'Beauty and Smart')**

**INSERT INTO**

**Product (ProductID , SupplyID, ProductName, Description)**

**VALUES (2030, 5730, 'Cream', 'Delicios and Creamy')**

**INSERT INTO**

**Product (ProductID , SupplyID, ProductName, Description)**

**VALUES (2040, 8090, 'fragnance', 'Wakening Essesnce')**

**\\\\**

**///Supply///**

**INSERT INTO**

**Supply (SupplyID, SupplierName)**

**VALUES (3030, 'SupplierGoods')**

**INSERT INTO**

**Supply (SupplyID, SupplierName)**

**VALUES (4430, 'MaterialSupply')**

**INSERT INTO**

**Supply (SupplyID, SupplierName)**

**VALUES (5730, 'GoodsMaker')**

**INSERT INTO**

**Supply (SupplyID, SupplierName)**

**VALUES (8090, 'PopsSupply')**

**\\\\**