



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	<code>SELECT FirstName FROM Staff ORDER BY FirstName</code>	yes
2	To open the customer order table and show the number of sets column in the order of ascending	1 table - CustomerOrder	<code>SELECT NumberOfSets FROM CustomerOrder ORDER BY NumberOfSets ASC</code>	yes
3	To open the customer order table and select any information that matches '77000' from the order id table.	1 table - CustomerOrder	<code>SELECT * FROM CustomerOrder WHERE ORDERID = 77000</code>	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	<code>SELECT FirstName FROM Customer WHERE Address = 'Clout Avenue'</code>	yes

The screenshot shows the phpMyAdmin interface. On the left, the database structure is visible, including tables like 'customer', 'CustomerOrder', 'dept', 'emp', 'item', 'ord', 'price', 'Product', 'product', 'ProductToSet', 'salgrade', 'Staff', and 'Supply'. The main panel displays the 'Staff' table structure with columns: 'id', 'FirstName', 'LastName', 'Address', 'City', 'Country', 'PostalCode', 'Phone', 'Fax', 'Email', 'Password', and 'SecurityQuestion'. Below the structure, the 'Query results' tab is active, showing the results of the query: `SELECT FirstName FROM Staff ORDER BY FirstName`. The results are displayed in a table with 4 rows: Chris, Ian, Justin, and Lin. The interface includes various navigation and query execution tools at the top and bottom.

Query no:1

phpMyAdmin

Recent Favorites

Server: PHPMYADMIN server » Database: w1727389_0 » Table: CustomerOrder

Browse Structure SQL Search Insert Export Import Operations Tracking Triggers

Show query box

Showing rows 0 - 3 (4 total, Query took 0.0005 seconds.) [NumberOfSets: 10... - 5...]

`SELECT NumberOfSets FROM CustomerOrder ORDER BY NumberOfSets ASC`

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

+ Options

	NumberOfSets
<input type="checkbox"/> Edit Copy Delete	10
<input type="checkbox"/> Edit Copy Delete	20
<input type="checkbox"/> Edit Copy Delete	26
<input type="checkbox"/> Edit Copy Delete	5

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table | Sort by key: None

Query results operations

Print Copy to clipboard Export Display chart Create view

Query no:2

phpMyAdmin

Recent Favorites

Server: PHPMYADMIN server » Database: w1727389_0 » Table: CustomerOrder

Browse Structure SQL Search Insert Export Import Operations Tracking Triggers

Show query box

Showing rows 0 - 0 (1 total, Query took 0.0005 seconds.)

`SELECT * FROM CustomerOrder WHERE ORDERID = 77000`

Show all | Number of rows: 25 | Filter rows: Search this table

+ Options

	OrderID	SetID	CustomerID	StaffID	NumberOfSets	SetOrdered	DeliveryDate
<input type="checkbox"/> Edit Copy Delete	77000	4	66	43	26	Deluxe	07/03/2020

Check all | With selected: Edit Copy Delete Export

Show all | Number of rows: 25 | Filter rows: Search this table

Query results operations

Print Copy to clipboard Export Display chart Create view

Bookmark this SQL query

Query no:3

The screenshot shows the phpMyAdmin interface. On the left is the database structure tree. The main panel displays the 'Customer' table with one row: 'Candy'. The SQL query box contains the query: `SELECT FirstName FROM Customer WHERE Address = 'Clout Avenue'`. Below the query box, there are options to show all rows (25) and a filter row search box. The 'Query results operations' section includes links for Print, Copy to clipboard, Export, Display chart, and Create view.

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),
```

```
        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, 'fragrance', '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, 'fragrance', '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')
```

```
\\
```