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| **AIM:** | DDL Commands Database Creation |
| **PROBLEM STATEMENT :** | Create a Table and show the relationship between two tables using a foreign key. |
| **Theory :** | |

# DDL

DDL is an abbreviation of Data Definition Language.
The DDL Commands in Structured Query Language are used to create and modify the schema of the database and its objects. The syntax of DDL commands is predefined for describing the data. The commands of Data Definition Language deal with how the data should exist in the database.
Following are the five DDL commands in SQL:

- CREATE Command
- DROP Command
- ALTER Command
- TRUNCATE Command
- RENAME Command

# CREATE Command

CREATE is a DDL command used to create databases, tables, triggers, and other database objects.

**Syntax to Create a Database:** CREATE Database Database_Name;

**Syntax to create a new table:**

```
CREATE TABLE table_name
(
column_Name1 data_type ( size of the column ) ,
column_Name2 data_type ( size of the column) ,
column_Name3 data_type ( size of the column) ,
...
column_NameN data_type ( size of the column )
) ;
```

# DROP Command

DROP is a DDL command used to delete/remove the database objects from the SQL database. This DDL command can easily remove the entire table, view, or index from the database.

**Syntax to remove a database**: DROP DATABASE Database_Name;

**Syntax to remove a table:** DROP TABLE Table_Name;

# ALTER Command

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| | ALTER is a DDL command which changes or modifies the existing structure of the database, and it also changes the schema of database objects. We can also add and drop constraints of the table using the ALTER command<br>**Syntax to add a new field in the table:**<br>ALTER TABLE name_of_table ADD column_name column_definition;<br>**TRUNCATE Command**<br>TRUNCATE is another DDL command which deletes or removes all the records from the table.<br>**Syntax of TRUNCATE command**<br>TRUNCATE TABLE Table_Name; |
| **Queries:** | CREATE DATABASE savapa;<br>use savapa;<br>CREATE TABLE Orderde(<br>orderID int NOT NULL UNIQUE primary key,<br>CustomerID int,<br>Resturname varchar(225) NOT NULL,<br>employeeID int not null,<br>price int not null,<br>payment_status varchar(225) NOT NULL default 'not completed'<br>);<br>CREATE TABLE Customers(<br>CustomerID int NOT NULL UNIQUE,<br>Customername varchar(225) NOT NULL,<br>phoneno int,<br>address varchar(255) default 'mumbai',<br>Email varchar(225),<br>orderID int,<br>PRIMARY KEY (CustomerID),<br>FOREIGN KEY (orderID) REFERENCES Orderde(orderID)<br>);<br>CREATE TABLE Restur(<br>ResturID int NOT NULL UNIQUE Primary key,<br>Resturname varchar(225) NOT NULL,<br>Rating int CHECK (Rating>=0 AND Rating<=5),<br>Varieties varchar(225),<br>Typ_of_food varchar(225),<br>Timing varchar(255),<br>orderID int,<br>FOREIGN KEY (orderID) REFERENCES Orderde(orderID)<br>);<br>CREATE TABLE Delivery_Person(<br>employeeID int not null unique primary key,<br>delname varchar(255) default 'ramesh', |

```
    phoneno int,
    Rating int CHECK (Rating>=0 AND Rating<=5),
    Shift_hr int not null default 8,
    orderID int,
    FOREIGN KEY (orderID) REFERENCES Orderde(orderID)
);
INSERT INTO Orderde values (1345,10,'taj hotel',20,20000,'completed');
INSERT INTO Orderde values (1356,11,'raj hotel',21,21,'completed');
INSERT INTO Orderde values (1398,12,'kaj hotel',22,200,'completed');
INSERT INTO Orderde values (1340,13,'maj hotel',23,2000,'completed');
INSERT INTO Orderde values (1349,14,'Roj hotel',24,20,'completed');
INSERT INTO Orderde values (1369,15,'Raz hotel',25,69,'fully completed');
INSERT INTO Restur values (1,'taj hotel',4.5,'Indian','Poha','1:00PM',1345);
INSERT INTO Restur values (2,'raj hotel',4,'conti','Baked Pesto Pasta.','10:00PM',1356);
INSERT INTO Restur values (3,'kaj hotel',3.5,'maxican','Machaca','11:00PM',1398);
INSERT INTO Restur values (4,'maj hotel',2.5,'russian','Kasha','12:00PM',1340);
INSERT INTO Restur values (5,'Roj hotel',1.5,'japp','Kinpira Gobo','1:00AM',1349);
INSERT INTO Restur values (6,'Raz hotel',0.5,'ghar','Chapal','Roj',1369);
INSERT INTO Customers values(10,'sahil',87971838,'vashi','sahil.ved@gmail.com',1345);
INSERT INTO Customers
values(11,'vansh',879718398,'unkown','vansh@gmail.com',1356);
INSERT INTO Customers values(12,'yash',87971834,'andheri','yash@gmail.com',1398);
INSERT INTO Customers values(13,'me',87971338,'SOBO','pranay@gmail.com',1340);
INSERT INTO Customers values(14,'you',8797138,'My
heart','tellyourname@gmail.com',1349);
INSERT INTO Customers values(15,'and our loneliness',6969696,'place not
mentionables','loneliness.hatao@gmail.com',1369);
INSERT INTO Delivery_Person values(20,'ram',87247923,2,8,1345);
INSERT INTO Delivery_Person values(21,'sham',8727843,3,8,1356);
INSERT INTO Delivery_Person values(22,'kam',872479823,4,8,1398);
INSERT INTO Delivery_Person values(23,'rod',87247983,5,8,1340);
INSERT INTO Delivery_Person values(24,'red',8722387,3,8,1349);
INSERT INTO Delivery_Person values(25,'kum kaj',8724823,2.5,8,1369);
SELECT * FROM savapa.Customers;
SELECT * FROM savapa.Delivery_Person;
SELECT * FROM savapa.Orderde;
SELECT * FROM savapa.Restur;
```

## Results:

*Customer Table:*

| CustomerID | Customername | phoneno | address | Email | orderID |
|---|---|---|---|---|---|
| 10 | sahil | 87971838 | vashi | sahil.ved@gmail.com | 1345 |
| 11 | vansh | 879718398 | unkown | vansh@gmail.com | 1356 |
| 12 | yash | 87971834 | andheri | yash@gmail.com | 1398 |
| 13 | me | 87971338 | SOBO | pranay@gmail.com | 1340 |
| 14 | you | 8797138 | My heart | tellyourname@gmail.com | 1349 |
| 15 | and our loneliness | 6969696 | place not mentionables | loneliness.hatao@gmail.com | 1369 |
| NULL | NULL | NULL | NULL | NULL | NULL |

*Delivery Person Table:*

| employeeID | delname | phoneno | Rating | Shift_hr | orderID |
|---|---|---|---|---|---|
| 20 | ram | 87247923 | 2 | 8 | 1345 |
| 21 | sham | 8727843 | 3 | 8 | 1356 |
| 22 | kam | 872479823 | 4 | 8 | 1398 |
| 23 | rod | 87247983 | 5 | 8 | 1340 |
| 24 | red | 8722387 | 3 | 8 | 1349 |
| 25 | kum kaj | 8724823 | 3 | 8 | 1369 |
| NULL | NULL | NULL | NULL | NULL | NULL |

*Order Details Table:*

| orderID | CustomerID | Resturname | employeeID | price | payment_stat... |
|---|---|---|---|---|---|
| 1340 | 13 | maj hotel | 23 | 2000 | completed |
| 1345 | 10 | taj hotel | 20 | 20000 | completed |
| 1349 | 14 | Roj hotel | 24 | 20 | completed |
| 1356 | 11 | raj hotel | 21 | 21 | completed |
| 1369 | 15 | Raz hotel | 25 | 69 | fully completed |
| 1398 | 12 | kaj hotel | 22 | 200 | completed |
| NULL | NULL | NULL | NULL | NULL | NULL |

*Restaurants Details Table:*

| ResturID | Resturname | Rating | Varieties | Typ_of_food | Timing | orderID | location |
|---|---|---|---|---|---|---|---|
| 1 | taj hotel | 5 | Indian | Poha | 1:00PM | 1345 | mumbai |
| 2 | raj hotel | 4 | conti | Baked Pesto Pasta. | 10:00PM | 1356 | mumbai |
| 3 | kaj hotel | 4 | maxican | Machaca | 11:00PM | 1398 | mumbai |
| 4 | maj hotel | 3 | russian | Kasha | 12:00PM | 1340 | mumbai |
| 5 | Roj hotel | 2 | japp | Kinpira Gobo | 1:00AM | 1349 | mumbai |
| 6 | Raz hotel | 1 | ghar | Chapal | Roj | 1369 | mumbai |
| NULL | NULL | NULL | NULL | NULL | NULL | NULL | NULL |

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| **Conclusion:** | From this experiment I concluded that we could create table using CREATE keyword and we could insert rows using INSERT keyword. We also learned about foreign key and primary key and keywords like “NOT NULL”, “DEFAULT” , “ CHECK”. We also learned about different data type present in SQL |