DDL(Data Definition Language) : DDL or Data Definition Language actually consists of the SQL commands that can be used to define the database schema.

•**CREATE** – is used to create the database or its objects (like table, index, function, views, store procedure and triggers).

•**DROP** – is used to delete objects from the database.

•**ALTER**-is used to alter the structure of the database.

•**TRUNCATE**–is used to remove all records from a table, including all spaces allocated for the records are removed.

•**COMMENT** –is used to add comments to the data dictionary.

•**RENAME** –is used to rename an object existing in the database.

CREATE

```
create table mytab(
c1 int, c2 varchar(255))
```

```
create table mytab1(
C1 int NOT NULL, c2 varchar(255))
```

```
create table mytab2(
C1 int NOT NULL UNIQUE,
c2 varchar(255))
```

```
create table mytab3(
C1 int NOT NULL PRIMARY Key, c2
varchar(255))
```

```
create table mytab4(
C1 int , c2 varchar(255),
PRIMARY KEY (c1,c2))
```

```
create table mytab5(
c1 int, c2 int, c3 varchar(200),
PRIMARY KEY (c1,c3),
FOREIGN KEY (c2)
REFERENCES mytab3(c1)
)
```

```
create table mytab6(
c1 int PRIMARY KEY,
c2 varchar(255),
c3 varchar(50)
DEFAULT 'KARACHI');
```

```
create table mytab7(
c1 int PRIMARY KEY,
c2 varchar(255),
c3 int
CHECK (c3>=10)
);
```

```
create table mytab8(
c1 int PRIMARY KEY,
c2 varchar(255),
c3 int,
CHECK (c1>15 AND
c3>=10)
);
```

SQL Constraints

SQL constraints are used to specify rules for the data in a table.

The following constraints are commonly used in SQL:

- **NOT NULL** - Ensures that a column cannot have a NULL value
- **UNIQUE** - Ensures that all values in a column are different
- **PRIMARY KEY** - A combination of a NOT NULL and UNIQUE. Uniquely identifies each row in a table
- **FOREIGN KEY** - Uniquely identifies a row/record in another table
- **CHECK** - Ensures that all values in a column satisfies a specific condition
- **DEFAULT** - Sets a default value for a column when no value is specified
- **INDEX** - Used to create and retrieve data from the database very quickly

DROP

drop table mytab8

truncate table mytab1

ALTER

- ALTER TABLE - ADD Column

```
ALTER TABLE mytab1
ADD c5 int

ALTER TABLE mytab1
ADD c6 int
ADD c7 int
```

- DROP Columns

```
ALTER TABLE mytab1
DROP column c6

ALTER TABLE mytab1
DROP (c5,c2)

ALTER TABLE mytab1
modify c7 varchar(100)
```