

[DDL & DML STATEMENTS]

[DAY-1]

Subject

[SQL PROGRAMMING]

Prepared By

[Priti Rai]

Overview

DDL statements are used to create database, schema, constraints, users, tables etc.
DML is Data Manipulation Language and is used to manipulate data. Examples of DML are insert, update and delete statements.



DDL & DML

SYNTAX

EXAMPLE

CREATE DATABASE

```
CREATE DATABASE databasename;
```

```
CREATE DATABASE testDB;
```

USE DATABASE

CREATE TABLE

```
CREATE TABLE table_name (  
  column1 datatype,  
  column2 datatype,  
  column3 datatype,  
  ....  
)
```

```
CREATE TABLE Persons (  
  PersonID int,  
  LastName varchar(255),  
  FirstName varchar(255),  
  Address varchar(255),  
  City varchar(255)  
)
```

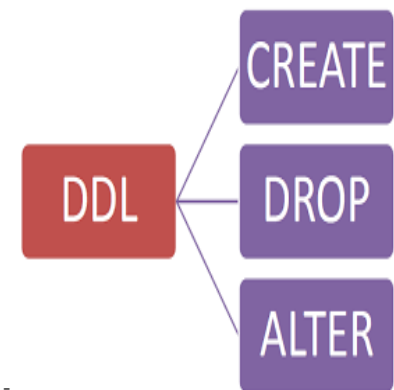
INSERT

```
INSERT INTO table_name (column1, column  
2, column3, ...)  
VALUES (value1, value2, value3, ...)
```

```
INSERT INTO table_name  
VALUES (value1, value2, value3, ...)
```

```
INSERT INTO Customers (CustomerName,  
ContactName, Address, City, PostalCode,  
Country)  
VALUES ('Cardinal', 'Tom B. Erichsen', 'Skagen  
21', 'Stavanger', '4006', 'Norway')
```

```
INSERT INTO Customers (CustomerName, City,  
Country)  
VALUES ('Cardinal', 'Stavanger', 'Norway')
```



<p>UPDATE</p>	<pre>UPDATE table_name SET column1 = value1, column2 = value2, ... WHERE condition;</pre>	<pre>UPDATE Customers SET ContactName = 'Alfred Schmidt', City= 'Frankfurt' WHERE CustomerID = 1</pre>	
<p>DELETE</p>	<pre>DELETE FROM table_name WHERE condition</pre> <pre>DELETE FROM table_name</pre>	<pre>UPDATE Customers SET ContactName='Juan' WHERE Country='Mexico'</pre> <pre>DELETE FROM Customers WHERE CustomerName='Alfreds Futterkiste'</pre> <pre>DELETE FROM Customers</pre>	
<p>SELECT</p>	<pre>SELECT column1, column2, ... FROM table_name</pre> <pre>SELECT * FROM table_name</pre>	<pre>SELECT CustomerName, City FROM Customers</pre> <pre>SELECT * FROM Customers</pre>	

Exercise

-----Prepare Sample Data To Practice SQL Skill-----

1. Sample Table Data– Worker

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT
001	Monika	Arora	100000	2014-02-20 09:00:00	HR
002	Niharika	Verma	80000	2014-06-11 09:00:00	Admin
003	Vishal	Singhal	300000	2014-02-20 09:00:00	HR
004	Amitabh	Singh	500000	2014-02-20 09:00:00	Admin
005	Vivek	Bhati	500000	2014-06-11 09:00:00	Admin
006	Vipul	Diwan	200000	2014-06-11 09:00:00	Account
007	Satish	Kumar	75000	2014-01-20 09:00:00	Account
008	Geetika	Chauhan	90000	2014-04-11 09:00:00	Admin

a). CREATE TABLE WORKER

```
WORKER_ID SMALLINT ,  
FIRST_NAME VARCHAR(25),  
LAST_NAME VARCHAR(25),  
SALARY SMALLINT,  
JOINING_DATE DATETIME,  
DEPARTMENT VARCHAR(25)
```

b). INSERT ABOVE SAMPLE DATA INTO WORKER TABLE

=====

2. Sample Table Data – Bonus

BONUS_ID	BONUS_DATE	BONUS_AMOUNT
1	2016-02-20 00:00:00	5000
2	2016-06-11 00:00:00	3000
3	2016-02-20 00:00:00	4000
1	2016-02-20 00:00:00	4500
2	2016-06-11 00:00:00	3500

```

a).CREATE TABLE Bonus
(
    BONUS_ID SMALLINT
    WORKER_REF_ID SMALLINT,
    BONUS_AMOUNT SMALLINT,
    BONUS_DATE DATETIME,

```

```

)
b). INSERT ABOVE SAMPLE DATA INTO BONUS TABLE
=====

```

3.Sample Table Data – Title

TITLE_ID	WORKER_TITLE	AFFECTED_FROM
1	Manager	2016-02-20 00:00:00
2	Executive	2016-06-11 00:00:00
8	Executive	2016-06-11 00:00:00
5	Manager	2016-06-11 00:00:00
4	Asst. Manager	2016-06-11 00:00:00
7	Executive	2016-06-11 00:00:00
6	Lead	2016-06-11 00:00:00
3	Lead	2016-06-11 00:00:00

```

a). CREATE TABLE Title (
    TITLE_ID SMALLINT,
    WORKER_REF_ID SMALLINT,
    WORKER_TITLE VARCHAR(25),
    AFFECTED_FROM DATETIME,

```

```

)
b). INSERT ABOVE SAMPLE DATA INTO TITLE TABLE

```