DML Commands

Data Manipulation Language (DML):

        DML commands are working on data within the table. By using DML commands we can't work on structure of the table.
This language contains the following commands:
1. Select

2. Insert

3. Update

4. Delete

SELECT:

        This command is used to retrieve the data from the existing table. Select command is also called as Data Query Language command or Data Retrieve Language command.

Syntax: SELECT * FROM <TABLE_NAME>;

Example 1: SELECT * FROM BUS;

Example 2: SELECT * FROM BUS WHERE BNO=10;

INSERT:

        This command is used to insert a new row into the table.

Syntax 1: INSERT INTO <TABLE_NAME> VALUES <VALUE1, VALUE2,…….VALUEn);

Example 1: INSERT INTO BUS VALUES (10,'ORANGE','HYDERABAD','BANGALORE','19:30:00','05:00:00');

NOTE: Here "INTO" keyword is optional.

Example 2: INSERT BUS VALUES (20,'KAVERI','HYDERABAD','CHENNAI','20:30:00','06:00:00');

SELECT * FROM BUS;

BNO	BNAME	SOURCE	DESTINATION	ARRTIME	DEPTIME
10	ORANGE	HYDERABAD	BANGALORE	19:30:00	05:00:00
20	KAVERI	HYDERABAD	CHENNAI	20:30:00	06:00:00

Syntax 2: INSERT INTO <TABLE_NAME> (REQ. COLUMN_NAMES) VALUES (VALUE1, VALUE2,…..VALUEn);

Example: INSERT INTO BUS (BNO,BNAME,ARRTIME,DEPTIME) VALUES (30,'KESINENI','21:30:00','10:00:00');

SELECT * FROM BUS;

BNO	BNAME	SOURCE	DESTINATION	ARRTIME	DEPTIME
10	ORANGE	HYDERABAD	BANGALORE	19:30:00	05:00:00
20	KAVERI	HYDERABAD	CHENNAI	20:30:00	06:00:00
30	KESINENI			21:30:00	10:00:00

Syntax 3: INSERT INTO <TABLE_NAME> VALUES (ROW1 VALUES), (ROW2 VALUES),…….(ROWn VALUES);

Example: INSERT INTO BUS VALUES

(40,'KOMITLA','BANGALORE','DELHI','11:30:00','20:00:00'),

(50,'DIWAKAR','CHENNAI','MYSORE','10:30:00','19:00:00'),

(60,'KALESWARI','MUMBAI','TIRUPATI','08:30:00','23:00:00'),

(70,'VOLVO','HYDERABAD','KADAPA','10:30:00','23:00:00');

SELECT * FROM BUS;

BNO	BNAME	SOURCE	DESTINATION	ARRTIME	DEPTIME
10	ORANGE	HYDERABAD	BANGALORE	19:30:00	05:00:00
20	KAVERI	HYDERABAD	CHENNAI	20:30:00	06:00:00
30	KESINENI			21:30:00	10:00:00
40	KOMITLA	BANGALORE	DELHI	11:30:00	20:00:00
50	DIWAKAR	CHENNAI	MYSORE	10:30:00	19:00:00
60	KALESWARI	MUMBAI	TIRUPATI	08:30:00	23:00:00
70	VOLVO	HYDERABAD	KADAPA	10:30:00	23:00:00

UPDATE:

This command is use to update all the records within the table & also update a specify record data by using WHERE clause.

Syntax 1: UPDATE <TABLE_NAME> SET <COLUMN_NAME1=VALUE>,………<COLUMN_NAMEn=VALUE>;

Example: UPDATE BUS SET SOURCE='HYDERABAD';

SELECT * FROM BUS;

BNO	BNAME	SOURCE	DESTINATION	ARRTIME	DEPTIME
10	ORANGE	HYDERABAD	BANGALORE	19:30:00	05:00:00
20	KAVERI	HYDERABAD	CHENNAI	20:30:00	06:00:00
30	KESINENI	HYDERABAD		21:30:00	10:00:00
40	KOMITLA	HYDERABAD	DELHI	11:30:00	20:00:00
50	DIWAKAR	HYDERABAD	MYSORE	10:30:00	19:00:00
60	KALESWARI	HYDERABAD	TIRUPATI	08:30:00	23:00:00
70	VOLVO	HYDERABAD	KADAPA	10:30:00	23:00:00

Syntax 2: UPDATE <TABLE_NAME> SET <COLUMN_NAME1=VALUE> ,…… <COLUMN_NAMEn=VALUE> WHERE (CONDITION);

Example 1: UPDATE BUS SET DESTINATION='MUMBAI' WHERE BNO=30;

Example 2: UPDATE BUS SET SOURCE='BANGLORE' WHERE BNO=40;

Example 3: UPDATE BUS SET SOURCE='CHENNAI' WHERE BNO=50;

Example 4: UPDATE BUS SET SOURCE='MUMBAI' WHERE BNO=60;

SELECT * FROM BUS;

BNO	BNAME	SOURCE	DESTINATION	ARRTIME	DEPTIME
10	ORANGE	HYDERABAD	BANGALORE	19:30:00	05:00:00
20	KAVERI	HYDERABAD	CHENNAI	20:30:00	06:00:00
30	KESINENI	HYDERABAD	MUMBAI	21:30:00	10:00:00
40	KOMITLA	BANGALORE	DELHI	11:30:00	20:00:00
50	DIWAKAR	CHENNAI	MYSORE	10:30:00	19:00:00
60	KALESWARI	MUMBAI	TIRUPATI	08:30:00	23:00:00
70	VOLVO	HYDERABAD	KADAPA	10:30:00	23:00:00

DELETE:

This command is use to delete all records from the table and also to delete specific record data by using WHERE clause.

Syntax 1: DELETE FROM <TABLE_NAME> WHERE (CONDITION);

Example: DELETE FROM BUS WHERE BNO=70;

SELECT * FROM BUS;

BNO	BNAME	SOURCE	DESTINATION	ARRTIME	DEPTIME
10	ORANGE	HYDERABAD	BANGALORE	19:30:00	05:00:00
20	KAVERI	HYDERABAD	CHENNAI	20:30:00	06:00:00
30	KESINENI	HYDERABAD	MUMBAI	21:30:00	10:00:00
40	KOMITLA	BANGALORE	DELHI	11:30:00	20:00:00
50	DIWAKAR	CHENNAI	MYSORE	10:30:00	19:00:00
60	KALESWARI	MUMBAI	TIRUPATI	08:30:00	23:00:00

Syntax 2: DELETE FROM <TABLE_NAME>;

Example: DELETE FROM BUS;

SELECT * FROM BUS;

BNO	BNAME	SOURCE	DESTINATION	ARRTIME	DEPTIME

ROADWAY_TRAVELS DATABASE

INSERT INTO BUS VALUES
(10,'ORANGE','HYDERABAD','BANGALORE','19:30:00','05:00:00'),
(20,'KAVERI','HYDERABAD','CHENNAI','20:30:00','06:00:00'),
(30,'KESINENI','HYDERABAD','MUMBAI','21:30:00','10:00:00'),
(40,'KOMITLA','BANGALORE','DELHI','11:30:00','20:00:00'),
(50,'DIWAKAR','CHENNAI','MYSORE','10:30:00','19:00:00'),
(60,'KALESWARI','MUMBAI','TIRUPATI','08:30:00','23:00:00');

SELECT * FROM BUS;

BNO	BNAME	SOURCE	DESTINATION	ARRTIME	DEPTIME
10	ORANGE	HYDERABAD	BANGALORE	19:30:00	05:00:00
20	KAVERI	HYDERABAD	CHENNAI	20:30:00	06:00:00
30	KESINENI	HYDERABAD	MUMBAI	21:30:00	10:00:00
40	KOMITLA	BANGALORE	DELHI	11:30:00	20:00:00
50	DIWAKAR	CHENNAI	MYSORE	10:30:00	19:00:00
60	KALESWARI	MUMBAI	TIRUPATI	08:30:00	23:00:00

INSERT INTO PASSENGER VALUES
(1,'TEJA','18','FEMALE','9191919191','TEJA@GMAIL.COM'),
(2,'LAVANYA','19','FEMALE','9292929292','LAVANYA@GMAIL.COM'),
(3,'SHRAVYA','18','FEMALE','9393939393','SHRAVYA@GMAIL.COM'),
(4,'PRAVALIKA','19','FEMALE','9494949494','PRAVALIKA@GMAIL.COM'),
(5,'SREENU','26','MALE','9595959595','SREENU@GMAIL.COM'),
(6,'VASU','50','MALE','9696969696','VASU@GMAIL.COM'),
(7,'NIVAS','35','MALE','9797979797','NIVAS@GMAIL.COM');

SELECT * FROM PASSENGER;

PID	PNAME	AGE	GENDER	PHNO	EMAIL
1	TEJA	18	FEMALE	9191919191	TEJA@GMAIL.COM
2	LAVANYA	19	FEMALE	9292929292	LAVANYA@GMAIL.COM
3	SHRAVYA	18	FEMALE	9393939393	SHRAVYA@GMAIL.COM
4	PRAVALIKA	19	FEMALE	9494949494	PRAVALIKA@GMAIL.COM
5	SREENU	26	MALE	9595959595	SREENU@GMAIL.COM
6	VASU	50	MALE	9696969696	VASU@GMAIL.COM
7	NIVAS	35	MALE	9797979797	NIVAS@GMAIL.COM

INSERT INTO TICKET VALUES
(101,1,20,'2017-01-07',2000), (102,2,30,'2017-01-07',3000), (103,3,10,'2017-01-07',1500),
(104,4,20,'2017-01-08',2000), (105,1,50,'2017-01-08',2500), (106,2,60,'2017-01-08',2600),
(107,5,10,'2017-01-09',1500), (108,6,50,'2017-01-09',2500), (109,5,40,'2017-01-10',2400),
(110,1,40,'2017-01-10',2400);

SELECT * FROM TICKET;

TID	PID	BNO	BDATE	PRICE
101	1	20	2017-01-07	2000
102	2	30	2017-01-07	3000
103	3	10	2017-01-07	1500
104	4	20	2017-01-08	2000
105	1	50	2017-01-08	2500
106	2	60	2017-01-08	2600
107	5	10	2017-01-09	1500
108	6	50	2017-01-09	2500
109	5	40	2017-01-10	2400
110	1	40	2017-01-10	2400

INSERT INTO RESERVATION VALUES
(101,'2017-01-12','YES','GOOD'), (102,'2017-01-12','YES','GOOD'),
(103,'2017-01-13','YES','GOOD'), (104,'2017-01-13','YES',NULL),
(107,'2017-01-13','YES','GOOD'), (108,'2017-01-14','NO','GOOD'),
(109,'2017-01-15','YES',NULL);

SELECT * FROM RESERVATION;

TID	JDATE	STATUS	REMARKS
101	2017-01-12	YES	GOOD
102	2017-01-12	YES	GOOD
103	2017-01-13	YES	GOOD
104	2017-01-13	YES	
107	2017-01-13	YES	GOOD
108	2017-01-14	NO	GOOD
109	2017-01-15	YES	

INSERT INTO CANCELLATION VALUES
(105,'2017-01-08','YES','BAD SERVICE'), (106,'2017-01-09','YES',NULL),
(110,'2017-01-10','NO','JOURNEY POSTPONED');

SELECT * FROM CANCELLATION;

TID	JDATE	STATUS	REMARKS
105	2017-01-08	YES	BAD SERVICE
106	2017-01-09	YES	
110	2017-01-10	NO	JOURNEY POSTPONED