

# **SQL STATEMENTS**

## **I.DATA DEFINITION LANGUAGE:**

### **1.CREATE :**

SYNTAX:

```
CREATE TABLE table_name
(
COLUMN_NAME1 DATATYPE NOT NULL / NULL,
COLUMN_NAME2 DATATYPE NOT NULL / NULL,
.
.
COLUMN_NAMEn DATATYPE NOT NULL / NULL,
CONSTRAINT constraint_ref_name UNIQUE(COLUMN_NAME),
CONSTRAINT constraint_ref_name CHECK(CONDITION),
CONSTRAINT constraint_ref_name PRIMARY KEY(COLUMN_NAME),
CONSTRAINT constraint_ref_name FOREIGN KEY(COLUMN_NAME)
REFERENCES parent_table_name (COLUMN_NAME)
);
```

### **2.RENAME:**

SYNTAX:

```
RENAME current_table_name TO New_name;
```

### **3.ALTER:**

#### **SYNTAX:**

##### **1.TO ADD A COL :**

```
ALTER TABLE table_name  
ADD COLUMN_NAME DATATYPE[NULL/NOT NULL];
```

##### **2.TO DROP A COL :**

```
ALTER TABLE table_name  
DROP COLUMN COLUMN_NAME ;
```

##### **3.TO CHANGE THE DATATYPE:**

```
ALTER TABLE table_name  
MODIFY COLUMN_NAME new_datatype;
```

##### **4.TO CHANGE THE NOT NULL CONSTRAINT:**

```
ALTER TABLE table_name  
MODIFY COLUMN_NAME existing_datatype NULL/NOTNULL;
```

##### **5.TO RENAME THE COLUMN:**

```
ALTER TABLE table_name  
RENAME COLUMN current_name TO new_name;
```

##### **6.TO MODIFY CONSTRAINTS:**

a) ALTER TABLE table\_name

```
ADD CONSTRAINT constraint_ref_name UNIQUE(column_name);
```

b) ALTER TABLE table\_name

```
ADD CONSTRAINT constraint_ref_name CHECK(condition);
```

c) ALTER TABLE table\_name

```
ADD CONSTRAINT constraint_ref_name PRIMARY KEY(column_name);
```

d) ALTER TABLE table\_name

```
ADD CONSTRAINT constraint_ref_name FOREIGN KEY(column_name) REFERENCES  
parent_table_name (column_name);
```

##### **7.TO DROP/DISABLE/ENABLE A CONSTRAINT:**

```
ALTER TABLE table_name  
DROP/DISABLE/ENABLE CONSTRAINT constraint_ref_name;
```

#### **4. TRUNCATE:**

SYNTAX: TRUNCATE TABLE table\_name;

#### **5. DROP:**

SYNTAX: DROP TABLE table\_name;

TO RECOVER THE TABLE:(only in oracle)

SYNTAX: FLASHBACK TABLE table\_name

TO BEFORE DROP

[RENAME TO new\_name]

TO DROP THE TABLE FROM RECYCLE BIN

SYNTAX: PURGE TABLE table\_name;

## **II.DATA MANIPULATION LANGUAGE**

### **1.INSERT:**

SYNTAX 1: INSERT INTO table\_name VALUES (V1,V2,....,Vn);

2: INSERT INTO table\_name (COL1,COL2,....COLn)  
VALUES(V1,V2,....,Vn);

Or

INSERT INTO table\_name (COL1,COL2,....COLn)  
VALUES(&COL1,&COL2,...&COLn)

3. INSERT INTO table\_name  
SELECT statement;

### **2.UPDATE:**

SYNTAX: UPDATE table\_name  
SET COL1=V1,COL2=V2,.....,COLn=Vn  
[WHERE <filter\_condition>];

### **3.DELETE:**

SYNTAX : DELETE  
FROM table\_name  
[WHERE <filter\_condition>];

### **III.TRANSACTION CONTROL LANGUAGE**

#### **1.COMMIT:**

SYNTAX: COMMIT;

#### **2.SAVEPOINT:**

SYNTAX: SAVEPOINT savepoint\_name;

#### **3.ROLLBACK:**

SYNTAX: ROLLBACK;

#### **ROLLBACK TO SAVEPOINT**

SYNTAX: ROLLBACK TO savepoint\_name;

### **IV.DATA CONTROL LANGUAGE:**

#### **1.GRANT:**

SYNTAX: GRANT sql\_statement ON table\_name  
TO user\_name;

#### **2.REVOKE: :**

SYNTAX: REVOKE sql\_statement ON table\_name  
FROM user\_name;

# **V.DATA QUERY LANGUAGE:**

## **1.SELECT:**

SELECT \*/[DISTINCT] column\_name/Expression [ALIAS]

## **2.PROJECTION:**

SYNTAX: SELECT \*/[DISTINCT] column\_name/Expression [ALIAS]  
FROM table\_name ;

## **3.SELECTION:**

SYNTAX: SELECT \*/[DISTINCT] column\_name/Expression [ALIAS]  
FROM table\_name  
WHERE <filter\_condition> ;

## **4.JOIN**

### **1.CARTESIAN JOIN/CROSS JOIN**

SYNTAX:ANSI->

SELECT col\_name  
FROM table\_name1 CROSS JOIN table\_name2;

SYNTAX:ORACLE->

SELECT col\_name  
FROM table\_name1, table\_name2;

## **2.INNER JOIN/EQUI JOIN**

SYNTAX:ANSI->

```
SELECT col_name  
FROM table_name1 INNER JOIN table_name2  
ON table_name1.col_name=table_name2.col_name;
```

SYNTAX:ORACLE->

```
SELECT col_name  
FROM table_name1, table_name2  
WHERE table_name1.col_name=table_name2.col_name;
```

## **3.OUTER JOIN**

### **I. LEFT OUTER JOIN**

SYNTAX:ANSI->

```
SELECT col_name  
FROM table_name1 LEFT [OUTER] JOIN table_name2  
ON table_name1.col_name=table_name2.col_name;
```

SYNTAX:ORACLE->

```
SELECT col_name  
FROM table_name1, table_name2  
WHERE table_name1.col_name=table_name2.col_name(+);
```

## II. RIGHT OUTER JOIN

SYNTAX:ANSI->

```
SELECT col_name  
FROM table_name1 RIGHT [OUTER] JOIN table_name2  
ON table_name1.col_name=table_name2.col_name;
```

SYNTAX:ORACLE->

```
SELECT col_name  
FROM table_name1, table_name2  
WHERE table_name1.col_name(+)=table_name2.col_name;
```

## III. FULL OUTER JOIN

SYNTAX:ANSI->

```
SELECT col_name  
FROM table_name1 FULL [OUTER] JOIN table_name2  
ON table_name1.col_name=table_name2.col_name;
```

NOTE: NO ORACLE SYNTAX FOR FULL OUTER JOIN

## 4.SELF JOIN

SYNTAX:ANSI->

```
SELECT col_name  
FROM table_name1 T1 JOIN table_name1 T2  
ON T1.col_name=T2.col_name;
```

SYNTAX:ORACLE->

```
SELECT col_name  
FROM table_name1 T1, table_name1 T2  
WHERE T1.col_name=T2.col_name;
```



## **5.NATURAL JOIN**

SYNTAX:ANSI->

```
SELECT col_name
```

```
FROM table_name1 NATURAL JOIN table_name2 ;
```

NOTE: NO ORACLE SYNTAX FOR NATURAL JOIN

