**CREATION:**

SQL> create table schools(id number(10),name varchar (10),marks number(3),grade varchar (2),city varchar (10));

Table created.

SQL> desc schools;

Name Null? Type

---------------------------- --------------------- ----------------------------

ID NUMBER(10)

NAME VARCHAR2(10)

MARKS NUMBER(3)

GRADE VARCHAR2(2)

CITY VARCHAR2(10)

**INSERTION:**

SQL> insert into schools values (1,'priya',99,'A','chennai');

1 row created.

SQL>insert into schools values ( 2,'raj',92,'A','chennai');

1 row created.

SQL> insert into schools values (3,'sath',88,'B','kerala');

1 row created.

SQL> insert into schools values (4,'panzil',77,'C','Pune');

1 row created.

SQL>insert into schools values (5,'maurin',60,'C','jaipur');

1 row created.

SQL>insert into schools values (6,'ramya',94,'A','delhi');

1 row created.

SQL> insert into schools values (7,'shreya',88,'B','bangalore');

1 row created.

SQL> insert into schools values(8,'sweety',69,'C','chennai');

1 row created.

SQL> insert into schools values(9,'sanjay',88,'B','chennai');

1 row created.

SQL> insert into schools values(10,'leena',79,'C','chennai');

1 row created.

SQL> select\*from schools;

ID NAME MARKS GRADE CITY

---------- -------------- ------------ -------------- -----------------

1 Priya 99 A chennai

2 raj 92 A chennai

3 sath 88 B kerala

4 panzil 77 C Pune

5 maurin 60 C jaipur

6 ramya 94 A delhi

7 shreya 88 B bangalore

8 swee 69 C chennai

9 sanjay 88 B chennai

10 leena 79 C chennai

10 rows selected.

**UPDATION:**

SQL> update schools set city='New Delhi' where name='ramya';

1 row updated.

SQL>select \*from schools;

ID NAME MARKS GR CITY

------------ ----------------- --------------- -------- ---------

1 priya 99 A chennai

2 raj 92 A chennai

3 sath 88 B kerala

4 panzil 77 C Pune

5 maurin 60 C jaipur

6 ramya 94 A New Delhi

7 shreya 88 B bangalore

8 sweety 69 C chennai

9 sanjay 88 B chennai

10 leena 79 C chennai

10 rows selected.

**DELETION:**

SQL> delete from schools where id=6;

1 row deleted.

SQL>select \*from schools;

ID NAME MARKS GR CITY

---------- -------------- ------------- ----------- -------------------

1 priya 99 A chennai

2 raj 92 A chennai

3 sath 88 B kerala

4 panzil 77 C Pune

5 maurin 60 C jaipur

7 shreya 88 B bangalore

8 sweety 69 C chennai

9 sanjay 88 B chennai

10 leena 79 C chennai

9 rows selected.

**SELECTION:**

1. **SELECT SPECIFIED COLUMN:**

SQL> select id from schools;

ID

----------

1

2

3

4

5

7

8

9

10

9 rows selected.

1. **SELECT ALL COLUMNS:**

SQL> select\*from schools;

ID NAME MARKS GRADE CITY

---------- ---------------- ------------- ----------- ------------------

1 priya 99 A chennai

2 raj 92 A chennai

3 sath 88 B kerala

4 panzil 77 C Pune

5 maurin 60 C jaipur

7 shreya 88 B bangalore

8 sweety 69 C chennai

9 sanjay 88 B chennai

10 leena 79 C chennai

9 rows selected.

1. **SELECT USING DISTINCT**:

SQL> select distinct city from schools;

CITY

----------

chennai

kerala

Pune

jaipur

Bangalore

1. **SELECT USING IN**:

SQL> select city from schools where id in 7;

CITY

----------

Bangalore

1. **SELECT USING BETWEEN**:

SQL> select name from schools where marks between 90 and 100;

NAME

----------

priya

raj

1. **SELECTION USING AS:**

**RENAMING COLUMN:**

SQL> select marks as maths\_mark from schools;

MATHS\_MARK

---------------------

99

92

88

77

60

88

69

88

79

9 rows selected.

**RENAMING TABLE:**

SQL> rename schools to student\_details;

Table renamed

SQL> select marks as student\_details from schools;

STUDENT\_DETAILS

---------------

99

92

88

77

60

88

69

88

79

1. rows selected.

**7.SORTING : (ORDER BY)**

SQL> select marks from schools where marks>80 order by name asc;

MARKS

-----------------

99

92

88

8888

SQL> select name,marks from schools where marks>80 order by name;

NAME MARKS

---------- ----------

priya 99

raj 92

sanjay 88

sath 88

shreya 88

**8.SELECTION USING NULL VALUE:**

SQL>select marks from schools where marks is null;

No rows selected.

**AGGREAGATE FUNCTIONS**

**SUM:**

SQL> select sum (salary) from employee where salary>40000;

SUM (SALARY)

-----------

597000

**COUNT:**

**S**QL> select count (salary) from employee where salary<60000;

COUNT (SALARY)

-------------

9

**MAX:**

SQL> select max (salary) from employee;

MAX (SALARY)

-----------

93000

**MIN:**

SQL> select min (salary) from employee;

MIN(SALARY)

-----------

20000

**AVG:**

SQL> select avg(salary)from employee;

AVG(SALARY)

-----------

52133.3333

**ALIAS NAME TO ONE PARTICULAR COLUMN:**

SQL> select count(employee\_id),sum(salary) from employee;

COUNT(EMPLOYEE\_ID) SUM(SALARY)

------------------ -----------

1. 782000

**DISTINCT:**

SQL> select distinct(emp\_name)from employee;

EMP\_NAME

--------------------

ravi

ashika

ashi

deeva

priya

ashwanth

prakash

ashok

sathana

priyanka

swetha

EMP\_NAME

--------------------

swathi

dharshini

ashwini

asha

15 rows selected.

**ARITHMETIC OPERATORS**

**ADD:**

SQL> select employee\_id, salary+1000 from employee;

EMPLOYEE\_ID SALARY+1000

----------------- ----------------

101 51000

102 26000

103 63000

104 83000

105 94000

2 21000

5 41000

8 51000

11 51000

14 81000

5 71000

EMPLOYEE\_ID SALARY+1000

------------------ ----------------

7 61000

9 31000

11 31000

13 41000

15 rows selected.

**SUB:**

SQL> select employee\_id, salary-100 from employee;

**OUTPUT:**

EMPLOYEE\_ID SALARY-100

----------- ----------

101 49900

102 24900

103 61900

104 81900

105 92900

2 19900

5 39900

8 49900

11 49900

14 79900

5 69900

EMPLOYEE\_ID SALARY-100

----------- ----------

7 59900

9 29900

11 29900

1. 39900

**MUL:**

SQL> select employee\_id, salary\*2 from employee;

**OUTPUT:**

EMPLOYEE\_ID SALARY\*2

------------------- -------------

101 100000

102 50000

103 124000

104 164000

105 186000

2 40000

5 80000

8 100000

11 100000

14 160000

5 140000

EMPLOYEE\_ID SALARY\*2

------------------ --------------

7 120000

9 60000

11 60000

13 80000

15 rows selected.

**DIV:**

SQL> select employee\_id, salary/2 from employee;

EMPLOYEE\_ID SALARY/2

------------------- ----------

101 25000

102 12500

103 31000

104 41000

105 46500

2 10000

5 20000

8 25000

11 25000

14 40000

5 35000

EMPLOYEE\_ID SALARY/2

------------------ -----------------

7 30000

9 15000

11 15000

13 20000

15 rows selected.

**MOD:**

SQL> select employee\_id, salary, mod (salary, 2) from employee;

EMPLOYEE\_ID SALARY MOD (SALARY, 2)

----------- ---------- -------------

101 50000 0

102 25000 0

103 62000 0

104 82000 0

105 93000 0

2 20000 0

5 40000 0

8 50000 0

11 50000 0

14 80000 0

5 70000 0

EMPLOYEE\_ID SALARY MOD (SALARY,2)

----------- ---------- -----------------------

7 60000 0

9 30000 0

11 30000 0

1. 40000 0
2. rows selected.

**GROUP BY , HAVING , WHERE & ORDER BY**

**ORDER BY:**

select\*from employee order by salary;

EMPLOYEE\_ID EMP\_NAME SALARY

----------- -------------------- ----------

2 priya 20000

102 sathana 25000

11 ashi 30000

9 ashwanth 30000

13 ashika 40000

5 dharshini 40000

101 swetha 50000

8 priyanka 50000

11 ashwini 50000

7 asha 60000

103 prakash 62000

EMPLOYEE\_ID EMP\_NAME SALARY

-------------------- ---------- -------------

5 ashok 70000

14 ravi 80000

104 swathi 82000

105 deeva 93000

15 rows selected.

**ORDER BY DESC**:

select\*from employee order by salary desc;

EMPLOYEE\_ID EMP\_NAME SALARY

----------- -------------------- ----------

105 deeva 93000

104 swathi 82000

14 ravi 80000

5 ashok 70000

103 prakash 62000

7 asha 60000

8 priyanka 50000

11 ashwini 50000

101 swetha 50000

5 dharshini 40000

13 ashika 40000

EMPLOYEE\_ID EMP\_NAME SALARY

----------- -------------------- ----------

11 ashi 30000

9 ashwanth 30000

102 sathana 25000

2 priya 20000

1. ows selected.

**ORDER BY NAME:**

SQL> select emp\_name from employee order by emp\_name desc;

EMP\_NAME

--------------------

swetha

swathi

sathana

ravi

priyanka

priya

prakash

dharshini

deeva

ashwini

ashwanth

EMP\_NAME

--------------------

ashok

ashika

ashi

asha

15 rows selected.

select emp\_name from employee order by emp\_name;

EMP\_NAME

--------------------

asha

ashi

ashika

ashok

ashwanth

ashwini

deeva

dharshini

prakash

priya

priyanka

EMP\_NAME

--------------------

ravi

sathana

swathi

swetha

15 rows selected.

SQL> select emp\_name,employee\_id from employee order by emp\_name;

EMP\_NAME EMPLOYEE\_ID

-------------------- -----------

asha 7

ashi 11

ashika 13

ashok 5

ashwanth 9

ashwini 11

deeva 105

dharshini 5

prakash 103

priya 2

priyanka 8

EMP\_NAME EMPLOYEE\_ID

-------------------- -----------

ravi 14

sathana 102

swathi 104

swetha 101

15 rows selected.

**ORDER BY USING WHERE CLAUSE:**

SQL> select employee\_id,salary from employee where emp\_name='priya'order by emp\_name;

EMPLOYEE\_ID SALARY

----------- ----------

2 20000

**GROUP BY CLAUSE:**

SQL> select emp\_name,max(salary)from employee group by emp\_name;

EMP\_NAME MAX(SALARY)

-------------------- -----------

ravi 80000

ashika 40000

ashi 30000

deeva 93000

priya 20000

ashwanth 30000

prakash 62000

ashok 70000

sathana 25000

swathi 50000

swetha 50000

EMP\_NAME MAX(SALARY)

-------------------- -----------

swathi 82000

dharshini 40000

ashwini 50000

asha 60000

**15 rows selected.**

SQL> select max(salary)from employee group by emp\_name;

MAX(SALARY)

-----------

80000

40000

30000

93000

20000

30000

62000

70000

25000

50000

50000

MAX(SALARY)

-----------

82000

40000

50000

60000

15 rows selected**.**

**GROUP BY USING WHERE CLAUSE:**

SQL> select emp\_name,min(salary)from employee where emp\_name='priya'group by emp\_name;

EMP\_NAME MIN(SALARY)

-------------------- -----------

priya 20000

**USING HAVING CLAUSE AND GROUP BY:**

SQL> select emp\_name,max(salary) from employee group by emp\_name having emp\_name='priya';

EMP\_NAME MAX(SALARY)

-------------------- -----------

priya 20000

**USING GROUP BY,HAVING AND ORDER BY:**

select count(employee\_id),emp\_name from employee group by emp\_name having emp\_name='priya' order by emp\_name;

COUNT(EMPLOYEE\_ID) EMP\_NAME

------------------ --------------------

1 priya