

Creating a table and inserting records

```
CREATE TABLE EMPLOYEE2(EMPID NUMBER(5),EMPNAME VARCHAR(20),MGRID  
NUMBER(5));
```

```
INSERT INTO EMPLOYEE2 VALUES(1, 'GURU', 2);
```

Selecting all the records in the table

```
SELECT * FROM EMPLOYEE;
```

Selecting certain records based on certain condition

```
SELECT * FROM EMPLOYEE WHERE EMPNAME = 'Guru';
```

Selecting only certain columns from a table

```
SELECT EMPID,EMPNAME FROM EMPLOYEE;
```

Selecting those records in which the name starts with a particular letter

```
SELECT * FROM EMPLOYEE WHERE EMPNAME LIKE 'A%';
```

Selecting those records in which the name has a particular letter or a set of letters in the middle of it

```
SELECT * FROM EMPLOYEE WHERE EMPNAME LIKE '%an%';
```

Selecting those records in which the name starts with any letter but has other letters as defined

```
SELECT * FROM EMPLOYEE WHERE EMPNAME LIKE '_na';
```

Updating the single column of a record in a table

```
UPDATE EMPLOYEE SET EMPNAME = 'Arvind' WHERE EMPID = 1001;
```

Updating all the records in a table column

```
UPDATE EMPLOYEE SET EMPSALARY = 15000;
```

Updating multiple columns of a record in a table

```
UPDATE EMPLOYEE SET EMPID = 1005, EMPNAME = "Arvind" WHERE EMPID = 1001;
```

Adding columns into a database table

```
ALTER TABLE EMPLOYEE ADD(EMPSALARY NUMBER(10,2));
```

Changing the datatype or size of the database column

```
ALTER TABLE EMPLOYEE MODIFY(EMPSALARY NUMBER(6,2));
```

ABS()

```
SELECT ABS(-20) FROM DUAL;
```

CEIL()

```
SELECT CEIL(15.1) FROM DUAL;
```

FLOOR()

```
SELECT FLOOR(15.9) FROM DUAL;
```

TRUNC()

```
SELECT TRUNC(13.1476,2) FROM DUAL;
```

ROUND()

```
SELECT ROUND(13.1476,2) FROM DUAL;
```

(JOIN)

```
SELECT B.BOOKNAME,A.AUTHORNAME FROM BOOKS B, AUTHOR A WHERE B.AUTHORID = A.AUTHORID;
```

(LEFT OUTER JOIN)

```
SELECT A.AUTHORNAME,B.BOOKNAME FROM AUTHOR A LEFT JOIN BOOKS B WHERE A.AUTHORID = B.AUTHORID;
```

(RIGHT OUTER JOIN)

```
SELECT A.AUTHORNAME,B.BOOKNAME FROM AUTHOR A RIGHT JOIN BOOKS B  
WHERE A.AUTHORID = B.AUTHORID;
```

(SELF JOIN)

```
SELECT E.EMPNAME,M.EMPNAME FROM EMPLOYEE E,EMPLOYEE M WHERE  
E.MANAGERID = M.EMPLOYEEID;
```

Displaying the count of the records in the table

```
SELECT COUNT(*) FROM EMPLOYEE;
```

Displaying the count of certain records that match a particular condition

```
SELECT COUNT(*) FROM EMPLOYEE WHERE DEPARTMENT = 'Accounts';
```

```
SELECT DEPARTMENT,COUNT(*) FROM EMPLOYEE GROUP BY DEPARTMENT;
```

```
SELECT DEPARTMENT,COUNT(*) FROM EMPLOYEE GROUP BY DEPARTMENT  
HAVING DEPARTMENT = 'Accounts';
```

```
SELECT DEPARTMENT,COUNT(*) FROM EMPLOYEE GROUP BY DEPARTMENT  
HAVING COUNT(*) < 2;
```

Displaying the sum of salary of employees in each department

```
SELECT DEPARTMENT,SUM(EMPLOYEE.SALARY) FROM EMPLOYEE GROUP BY  
DEPARTMENT;
```

Displaying the average of salary of employees in each department

```
SELECT DEPARTMENT,AVG(EMPLOYEE.SALARY) FROM EMPLOYEE GROUP BY  
DEPARTMENT;
```

