1. **Select Queries**
   1. Display all departments from department table.

select \*from DEPT;

* 1. Display all employees from employee table.

select \*from EMP;

* 1. Select the employee in department 30.

SELECT \* FROM EMP WHERE DEPT\_No=30;

* 1. List the names, numbers and departmentno of all clerks.

SELECT ID ,NAME ,DEPT\_NO FROM EMP WHERE ROLE='clerk';

* 1. Find the depart numbers and the name of employee of all dept with Deptno greater or equal to 20.

SELECT dept\_no,name FROM emp

GROUP BY deptno

HAVING dept\_no>20;

* 1. Find the employees whose commission is greater than their salary.

select \* from EMP where COMMISSION >= SALARY;

* 1. Find the employees whose commission is greater than 60 percent of their salary.

select \* from EMP where COMMISSION <=(SALARY\*60)/100;

* 1. Find the employee whose commission is greater than 50 percent of their salary.

select \* from EMP where COMMISSION <=(SALARY\*50)/100;

* 1. List the name, job and salary of all employees in dept 20 who earn more than 2000.

select name,role from emp where SALARY>2000 and DEPT\_NO=20;

* 1. Find all salesmen in dept 30 whose salary is greater than or equal to Rs. 1500.

select \*from emp where dept\_no=1 AND salary >=1500;

* 1. Find all the employees whose job is either a president or manager.

SELECT \* FROM emp WHERE role='President' OR role='Manager';

* 1. Find all managers who are not in dept 30.

SELECT \*FROM emp WHERE role='Manager' AND dept\_no!= 3;

* 1. Find the details of all managers and clerks in dept 10.

SELECT \*FROM emp WHERE role='Manager' OR role='Clerk' AND dept\_no=5;

* 1. Find the details of all manager (in any dept) and all clerks in dept 10

SELECT \*FROM emp WHERE dept\_no=5 AND role='Clerk' AND role='Manager';

* 1. Find the details of all managers in dept 10 and all clerks in dept 20.

SELECT \*FROM emp WHERE dept\_no=1 AND role='Manager' AND role='Clerk';

* 1. Find all employees who are neither clerks nor manager but whose salary is greater than or equal to Rs. 2000.

SELECT \*FROM emp WHERE role!='Clerk' AND role!='Manager' OR salary>=2000;

* 1. Find the employees who earns between Rs. 1200 and Rs.1400.

SELECT \* FROM emp WHERE salary BETWEEN 18000 and 60000;

* 1. Find the employees who are clerks, analysts or salesman.

SELECT \* FROM emp WHERE role='Clerk' AND role='Analyst' AND role='Salesman' ;

* 1. Find the employees who are not clerks, analyst or salesman.

SELECT \* FROM emp WHERE role!='Clerk' AND role!='Analyst' AND role!='Salesman';

* 1. Find the employees who do not receive a commission i.e. commission is NULL.

SELECT \* FROM emp WHERE commission IS NULL;

* 1. Find the employee whose commission is Rs. 0.

SELECT \* FROM emp WHERE commission=0;

* 1. Find the different jobs of the employees receiving commission.

SELECT role,commission

FROM emp

GROUP BY role;

* 1. Find all employees who do not receive a commission or whose Commission is less than Rs. 100.

select \*from emp where commission<100 OR commission=0;

* 1. The employees who not receiving commission are entailed to Rs. 250, Show the net earnings of all employees. (find about **nvl() )**

SELECT NVL(commission, 250)

FROM emp;

* 1. Find all employees whose total earnings are greater than Rs. 2000.

SELECT dept\_no, sum (salary) FROM emp

GROUP BY dept\_no

HAVING sum (salary) > 2000;

* 1. Find all employees whose names begin with m.

SELECT \* FROM emp WHERE ename LIKE ‘m%';

* 1. Find all employees whose names end with m.

SELECT \* FROM emp WHERE ename LIKE ‘%m';

* 1. Find all employees whose names contain the letter m.

select \* from EMP where name like '%m%';

* 1. Find the employees whose names are 5 characters long and end with n.

SELECT \* FROM emp WHERE name LIKE ‘\_\_\_\_n';

* 1. Find the employees who have the letter r as the third letter in their name.

SELECT `name` FROM `EMP` WHERE SUBSTR(`name`, LENGTH(`name`)/2+1, 1) = 'r';

1. **Numeric, Character & Date Function** 
   1. Find all employees hired in month of February (of any year).

select \*from emp where hired\_date='04/02/2012';

* 1. Find all employees who were hired on the last day of the month.

SELECT last\_day (hired\_date) FROM emp;

* 1. Find the employees who were hired more than 12 years ago.

select name form emp where sysdate-hired\_date>12\*365;

* 1. Find the managers hired in the year 2007.

SELECT \* FROM EMP where to\_char(HIRED\_DATE, 'YYYY')=2007;

* 1. Display the names and the jobs of all employees, separated by ','(comma). For example (smith, clerk).

SELECT CONCAT(NAME, CONCAT(',', ROLE)) FROM EMP;

* 1. Display the names of all employees with the initial letter only in capitalSELECT INITCAP(NAME) FROM EMP;
  2. Display the names of all employees, right aligning them to 15 characters.

SELECT RPAD(NAME,15) FROM EMP;

* 1. Display the names of all employees, padding them to right up-to 15 characters with '-'.

SELECT RPAD(NAME, 15, '- ') FROM EMP;

* 1. Display the length of the name of all employees.

SELECT LENGTH(NAME) FROM EMP;

* 1. Display the names of all employees centering them with 20 characters.

SELECT LPAD(RPAD(NAME, 10, ' '), 20, ' ') FROM EMP;

* 1. Display the names of all employees without any leading 'a'.

SELECT \* FROM EMP WHERE NOT NAME='A%';

* 1. Display the names of all employees without any trailing 'r'.

SELECT \* FROM EMP WHERE NOT NAME='%r';

* 1. Show the first three characters of the names of all employees.

SELECT SUBSTR(NAME,1,3) FROM EMP;

* 1. Show the last three characters of the names of all employees.

SELECT SUBSTR(name,-3) FROM emp;

* 1. Display the names of all employees replacing any 'a' with 'e'.

SELECT REPLACE(NAME,'a','e') FROM EMP;

* 1. Display the names of all employees and the position at which the string 'ar' occurs in the name.

SELECT NAME, INSTR(NAME,'ar') FROM EMP;

* 1. Show the salary of all employees rounding it to the nearest Rs. 1000. For example (3790 will be 4000)

SELECT SALARY, SALARY/1000, CEIL(SALARY/1000), CEIL(SALARY/1000)\*1000 FROM EMP;

* 1. Show the daily salary of all employees assuming a month has 30 days.

SELECT SALARY,SALARY/30 AS DAILY\_SAL FROM EMP;

* 1. Display the name of all employees, and their bonus. Assume each Employee gets a bonus of 20 percent of his salary subject to the Maximum of Rs. 500.

SELECT CASE WHEN SALARY \* 0.2 < 500 THEN SALARY \* 0.2 ELSE 500 END AS SALARY FROM EMP;

* 1. Display the name of all employees, and their bonus. Assume each employee gets a bonus of 20 percent of his salary subject to the Maximum of Rs. 200.

SELECT CASE WHEN SALARY \* 0.2 < 200 THEN SALARY \* 0.2 ELSE 200 END AS SALARY FROM EMP;

* 1. For each employee display the number of days passed since the employee joined the company.

SELECT name, trunc(sysdate) - to\_date(HIRED\_DATE) diff from emp;

* 1. For each employee display the number of months passed since the Employee joined the company.

SELECT MONTHS\_BETWEEN(sysdate,HIRED\_DATE) diff from emp;

* 1. Display the tenure of service in the years, months and days for all Employees in character format. Assume every month has 30 days.

SELECT TO\_CHAR(HIRED\_DATE, 'YYYY'), TO\_CHAR(HIRED\_DATE, 'MM'), TO\_CHAR(HIRED\_DATE, 'DD') FROM EMP;

* 1. Display the employee details in the following manner. 'Miler joined on the twenty-third of January of the year nineteen hundred and eighty Two'.

SELECT CONCAT(NAME, CONCAT(' joined on ', CONCAT(TO\_CHAR(HIRED\_DATE, 'DD'), CONCAT(' of ', CONCAT(TO\_CHAR(HIRED\_DATE, 'Month'),  CONCAT(' of the year ', TO\_CHAR(HIRED\_DATE, 'Year'))))))) FROM EMP;

1. **Ordering by Queries**
   1. Display the details of all employees, sorted on the names.

SELECT \* FROM EMP ORDER BY NAME;

* 1. Display the name of all employees, based on their tenure, with the oldest employee coming first.

SELECT \* FROM EMP ORDER BY TO\_CHAR(SYSDATE, 'YYYY') - TO\_CHAR(HIRED\_DATE, 'YYYY') DESC SELECT \* FROM EMP ORDER BY TO\_CHAR(SYSDATE, 'YYYY') - TO\_CHAR(HIRED\_DATE, 'YYYY') DESC;

* 1. Display the names, job and salary of all employees sorted on jobs and Salary.

SELECT NAME, ROLE, SALARY FROM EMP ORDER BY ROLE,SALARY;

* 1. Display the names, job and salary of all employees, sorted on jobs and within job, sorted on the descending order of salary.

SELECT NAME, ROLE, SALARY FROM EMP ORDER BY ROLE,SALARY DESC;

* 1. Display the names, job and salary of all employees, sorted on Descending order of job and within job, sorted on the descending order of salary.

SELECT NAME, ROLE, SALARY FROM EMP ORDER BY ROLE DESC,SALARY DESC;

* 1. Display the name, month and year of all employees, sorted on the month of their hire date irrespective of the year.

SELECT NAME, TO\_CHAR(HIRED\_DATE, 'MONTH'), TO\_CHAR(HIRED\_DATE, 'YYYY') FROM EMP ORDER BY TO\_CHAR(HIRED\_DATE, 'MM');

* 1. Display the name, month and year of joining of all employees, sorted on the month of their hire date, and within that on the year, with the earliest year appearing first.

SELECT NAME, TO\_CHAR(HIRED\_DATE, 'MONTH'), TO\_CHAR(HIRED\_DATE, 'YYYY') FROM EMP ORDER BY TO\_CHAR(HIRED\_DATE, 'YYYY'),TO\_CHAR(HIRED\_DATE, 'MM');