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

SELECT \* FROM DEPARTMENTS;

* 1. Display all employees from employee table.

SELECT \* FROM EMPLOYEES;

* 1. Select the employee in department 30.

SELECT \* FROM EMPLOYEES WHERE DEPNO=’30’;

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

SELECT ENAME, EMPNO, DEPNO FROM EMPLOYEES WHERE JOB=’CLERK’;

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

SELECT DEPNO, ENAME FROM EMPLOYEES WHERE DEPNO>=20;

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

SELECT \* FROM EMPLOYEES WHERE COMM>SAL;

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

SELECT \* FROM EMPLOYEES WHERE COMM>(SAL\*0.6);

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

SELECT \* FROM EMPLOYEES WHERE COMM>(SAL\*0.5);

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

SELECT ENAME,JOB,SAL FROM EMPLOYEES WHERE DEPNO=’20’ AND SAL>2000;

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

SELECT \* FROM EMPLOYEES WHERE JOB=’SALESMAN’ AND DEPNO=’20’;

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

SELECT \* FROM EMPLOYEES WHERE JOB IN (‘PRESIDENT’,’MANAGER’);

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

SELECT \* FROM EMPLOYEES WHERE JOB=’MANAGER’ AND DEPNO NOT IN ‘30’;

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

SELECT \* FROM EMPLOYEES WHERE JOB IN (‘MANAGER’,’CLERK’) AND DEPNO=’10’;

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

SELECT \* FROM EMPLOYEES WHERE (SELECT \* FROM EMPLOYEES WHERE JOB=’MANAGER’) AND (SELECT \* FROM EMPLOYEES WHERE JOB=’CLERK’ AND DEPNO=’10’);

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

SELECT \* FROM EMPLOYEES WHERE (SELECT \* FROM EMPLOYEES WHERE JOB=’MANAGER’ AND DEPNO=’10’) AND (SELECT \* FROM EMPLOYEES WHERE JOB=’CLERK’ AND DEPNO=’20’);

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

SELECT \* FROM EMPLOYEES WHERE JOB NOT IN (‘MANAGER’,’CLERK’) AND SAL>=2000;

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

SELECT \* FROM EMPLOYEES WHERE SAL BETWEEN 1200 AND 1400;

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

SELECT \* FROM EMPLOYEES WHERE JOB IN (‘CLERKS’,’ANALYSTS’,’SALESMAN’);

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

SELECT \* FROM EMPLOYEES WHERE JOB NOT IN (‘CLERKS’,’ANALYSTS’,’SALESMAN’);

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

SELECT \* FROM EMPLOYEES WHERE COMM IS NULL;

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

SELECT \* FROM EMPLOYEES WHERE COMM =0;

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

SELECT DISTINCT JOB FROM EMPLOYEES WHERE COMM IS NOT NULL;

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

SELECT \* FROM EMPLOYEES WHERE COMM <100 OR COMM IS NULL;

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

SELECT SAL+COMM AS EARNINGS FROM EMPLOYEES WHERE NVL(COMM,250);

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

SELECT \* FROM EMPLOYEES WHERE SAL+COMM>2000;

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

SELECT \* EMPLOYEES WHERE ENAME LIKE ‘M%’;

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

SELECT \* EMPLOYEES WHERE ENAME LIKE ‘%M’;

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

SELECT \* EMPLOYEES WHERE ENAME LIKE ‘%M%’;

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

# SELECT \* EMPLOYEES WHERE ENAME LIKE ‘\_\_\_\_\_N’;

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

SELECT \* EMPLOYEES WHERE ENAME LIKE ‘\_\_\_R%’;

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

SELECT \* FROM EMPLOYEES WHERE TO\_CHAR(HIRE\_DATE,’MON’)=’FEB’;

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

SELECT \* FROM EMPLOYEES WHERE LAST\_DAY(HIRE\_DATE);

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

SELECT \*, TIMESTAMPDIFF(YEAR, HIRE\_DATE, SYSDATE ()) as

LAST12YEARS FROM EMPLOYEES

WHERE TIMESTAMPDIFF(YEAR, HIRE\_DATE, SYSDATE ())

BETWEEN 1 AND 12 ORDER BY HIRE\_DATE DESC;

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

SELECT \* FROM EMPLOYEES WHERE TO\_CHAR(HIRE\_DATE,’YEAR’)=’2007’;

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

SELECT ENAME || ‘ , ’ || JOB AS EMP FROM EMPLOYEES;

* 1. Display the names of all employees with the initial letter only in capitals.

SELECT INITCAP(ENAME) AS NAME FROM EMPLOYEES;

* 1. Display the names of all employees, right aligning them to 15 characters.

SELECT RPAD(ENAME,15) AS NAME FROM EMPLOYEES;

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

SELECT RPAD(ENAME,15,’-’) AS NAME FROM EMPLOYEES;

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

SELECT LENGTH(ENAME) FROM EMPLOYEES;

* 1. Display the names of all employees centering them with 20 characters.
  2. Display the names of all employees without any leading 'a'.

SELECT LTRIM(ENAME,’A’) AS NAME FROM EMPLOYEES;

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

SELECT RTRIM(ENAME,’R’) AS NAME FROM EMPLOYEES;

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

SELECT SUBSTR(ENAME,1,3) AS NAME FROM EMPLOYEES;

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

SELECT SUBSTR(ENAME,-1,3) AS NAME FROM EMPLOYEES;

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

SELECT REPLACE(ENAME,’A’,’E’) AS NAME FROM EMPLOYEES;

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

SELECT INSTR(ENAME,’AR’) AS NAME FROM EMPLOYEES;

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

SELECT ROUND(SAL,0) AS SALARY FROM MEPLOYEES;

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

SELECT SAL/30 AS SALARY\_PER\_DAY FROM EMPLOYEES;

* 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 NAME, SAL\*0.2 AS BONUS FROM EMPLOYEES WHERE SAL\*0.2<=500;

* 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 NAME, SAL\*0.2 AS BONUS FROM EMPLOYEES WHERE SAL\*0.2<=200;

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

SELECT TRUNC(SYSDATE) - TO\_DATE(HIRE\_DATE, 'YYYY-MM-DD') AS DAYS FROM EMPLOYEES;

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

SELECT MONTHS\_BETWEEN(TO\_DATE(SYSDATE, 'YYYY-MM-DD') , TO\_DATE(HIREDATE, 'YYYY-MM-DD')) AS MONTHS FROM EMPLOYEES;

* 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 SYSDATE, HIRE\_DATE,

TRUNC(MONTHS\_BETWEEN(SYSDATE,HIRE\_DATE)/12) YEARS,

TRUNC(MONTHS\_BETWEEN(SYSDATE,HIRE\_DATE) -

(TRUNC(MONTHS\_BETWEEN(SYSDATE,HIRE\_DATE)/12)\*12)) MONTHS,

TRUNC((MONTHS\_BETWEEN(SYSDATE,HIRE\_DATE) -

TRUNC(MONTHS\_BETWEEN(SYSDATE,HIRE\_DATE)))\*30) DAYS

FROM EMPLOYEES;

* 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 ENAME || ‘ JOINED ON THE ’ || TO\_CHAR(HIRE\_DATE, 'DDSPTH “ OF ” MONTH “ OF THE YEAR ” YEAR.') AS DETAILS FROM EMPLOYEES;

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

SELECT \* FROM EMPLOYEES ORDER BY ENAME;

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

SELECT \* FROM EMPLOYEES ORDER BY (SYSDATE()-HIRE\_DATE) DESC;

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

SELECT JOB ,SAL FROM EMPLOYEES ORDER BY JOB,SAL;

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

SELECT ENAME,JOB,SAL FROM EMPLOYEES ORDER BY JOB ASC, SAL 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 ENAME,JOB,SAL FROM ORDER BY JOB DESC, SAL DESC;

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

SELECT ENAME, TO\_CHAR(HIRE\_DATE,’MON’) AS MONTH, TO\_CHAR(HIRE\_DATE,’YEAR’) AS YEAR ORDER BY TO\_CHAR(HIRE\_DATE,’MON’) ;

* 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 ENAME, TO\_CHAR(HIRE\_DATE,’MON’) AS MONTH, TO\_CHAR(HIRE\_DATE,’YEAR’) AS YEAR ORDER BY TO\_CHAR(HIRE\_DATE,’MON’) , TO\_CHAR(HIRE\_DATE,’YEAR’) ASC ;