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 DEPTNO=30;

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

SELECT ENAME,EMPNO,DEPTNO FROM EMP WHERE JOB = ‘CLERK’

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

SELECT DEPTNO,ENAME FROM EMP WHERE DEPTNO >= 20;

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

SELECT ENAME FROM EMP WHERE COMM > SAL;

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

SELECT ENAME FROM EMP WHERE COMM > (60/100)\*SAL;

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

SELECT ENAME FROM EMP WHERE COMM > (50/100)\*SAL;

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

SELECT ENAME,JOB,SAL FROM EMP WHERE DEPTNO =20 AND SAL>2000;

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

SELECT \* FROM EMP WHERE DEPTNO=30 AND SAL >= 1500 AND JOB = 'SALESMAN';

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

SELECT \* FROM EMP WHERE JOB = 'PRESIDENT' OR JOB = 'MANAGER'

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

SELECT \* FROM EMP WHERE JOB = 'MANAGER' AND DEPTNO != 30;

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

SELECT \* FROM EMP WHERE DEPTNO=10 AND (JOB = 'CLERK' OR JOB = 'MANAGER');

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

SELECT \* FROM EMP WHERE JOB = 'MANAGER' OR (JOB = 'CLERK' AND DEPTNO = 10);

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

SELECT \* FROM EMP WHERE (JOB = 'MANAGER' AND DEPTNO=10) OR (JOB = 'CLERK' AND DEPTNO = 20);

* 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 (JOB != 'MANAGER' AND JOB != 'CLERK') AND SAL >= 2000;

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

SELECT \* FROM EMP WHERE (SAL >= 1200 AND SAL<=1400);

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

SELECT \* FROM EMP WHERE JOB = 'CLERK' OR JOB= 'ANALYST' OR JOB='SALESMAN';

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

SELECT \* FROM EMP WHERE JOB != 'CLERK' AND JOB!= 'ANALYST' AND JOB!='SALESMAN';

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

SELECT \* FROM EMP WHERE (COMM IS NULL);

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

SELECT \* FROM EMP WHERE COMM = 0;

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

SELECT JOB FROM EMP WHERE COMM IS NOT NULL AND COMM != 0;

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

SELECT \* FROM EMP WHERE (COMM IS NULL) OR COMM < 100;

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

SELECT SUM (NVL(COMM,250)+SAL) FROM EMP;

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

SELECT \* FROM EMP WHERE SAL+(NVL(COMM,0))>2000;

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

SELECT ENAME FROM EMP WHERE ENAME LIKE 'M%';

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

SELECT ENAME FROM EMP WHERE ENAME LIKE '%M';

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

SELECT ENAME FROM EMP WHERE ENAME LIKE '%M%';

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

SELECT ENAME FROM EMP WHERE LENGTH(ENAME)=5 AND ENAME LIKE '%N';

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

SELECT ENAME FROM EMP WHERE ENAME LIKE '\_\_R%';

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

SELECT \* FROM EMP

where EXTRACT(MONTH FROM(HIREDATE)) = 2 ;

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

SELECT \* FROM EMP

where EXTRACT(DAY FROM LAST\_DAY(HIREDATE)) = EXTRACT (DAY FROM(HIREDATE))

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

SELECT \* FROM EMP

WHERE EXTRACT(YEAR FROM SYSDATE) - EXTRACT(YEAR FROM(HIREDATE)) >= 12;

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

SELECT \* FROM EMP

WHERE EXTRACT(YEAR FROM(HIREDATE)) = 2007 AND JOB = ‘MANAGER’;

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

SELECT '(' || ENAME || ',' || JOB || ')' FROM EMP

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

SELECT INITCAP(ENAME) FROM EMP;

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

SELECT LPAD(ENAME,15,' ') FROM EMP;

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

SELECT LPAD(ENAME,15,'-') FROM EMP;

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

SELECT LENGTH(ENAME) FROM EMP;

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

SELECT LPAD(RPAD(ENAME,LENGTH(ENAME)+10,'-'),LENGTH(ENAME)+20,'-') FROM EMP;

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

SELECT TRIM(LEADING 'A' FROM ENAME) FROM EMP;

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

SELECT TRIM(TRAILING 'R' FROM ENAME) FROM EMP;

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

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

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

SELECT SUBSTR(ENAME,-3) FROM EMP;

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

SELECT REPLACE(ENAME, 'A', 'E')

FROM EMP

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

SELECT ENAME,INSTR(ENAME,'AR')FROM EMP;

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

SELECT SAL,ROUND(SAL,-3) FROM EMP

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

SELECT SAL,ROUND(SAL/30) AS DAILYsSAL 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 ENAME,SAL,(

CASE

WHEN 0.2\*SAL>500

THEN 500

ELSE 0.2\*SAL END

)AS BONUS,

SAL +(CASE

WHEN 0.2\*SAL>500

THEN 500

ELSE 0.2\*SAL END) AS TOTAL

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 ENAME,SAL,(

CASE

WHEN 0.2\*SAL>200

THEN 200

ELSE 0.2\*SAL END

)AS BONUS,

SAL +(CASE

WHEN 0.2\*SAL>200

THEN 200

ELSE 0.2\*SAL END) AS TOTAL

FROM EMP;

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

SELECT ENAME,ROUND(SYSDATE - TO\_DATE(HIREDATE)) FROM EMP;

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

SELECT ENAME,ROUND(SYSDATE - TO\_DATE(HIREDATE))/30 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 ENAME,ROUND((SYSDATE - TO\_DATE(HIREDATE))/30/12) AS YEARS,ROUND((SYSDATE - TO\_DATE(HIREDATE))/30) AS MONTHS, ROUND((SYSDATE - TO\_DATE(HIREDATE))) AS DATES FROM EMP;

SELECT SYSDATE,

HIREDATE,

TRUNC(MONTHS\_BETWEEN(SYSDATE,HIREDATE)/12) AS YEARS,

TRUNC(MONTHS\_BETWEEN(SYSDATE,HIREDATE)-

(TRUNC(MONTHS\_BETWEEN(SYSDATE,HIREDATE)/12)\*12)) AS MONTHS,

TRUNC(SYSDATE) -

ADD\_MONTHS(HIREDATE,TRUNC(MONTHS\_BETWEEN(SYSDATE,HIREDATE)))AS DAYS

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 ENAME || ' JOINED ON THE ' ||

TO\_CHAR(HIREDATE,'DDSP')|| ' OF ' ||

TO\_CHAR(HIREDATE,'MONTH') || ' OF THE YEAR ' ||

TO\_CHAR(HIREDATE,'YEAR')

FROM EMP;

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

SELECT \* FROM EMP ORDER BY ENAME;

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

SELECT \* FROM EMP ORDER BY HIREDATE;

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

SELECT ENAME,JOB,SAL FROM EMP 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 EMP ORDER BY JOB,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 EMP 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,JOB,SAL,HIREDATE FROM EMP ORDER BY EXTRACT(MONTH FROM(HIREDATE));

* 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,JOB,SAL,HIREDATE FROM EMP ORDER BY EXTRACT(MONTH FROM(HIREDATE)),EXTRACT(YEAR FROM(HIREDATE));