

# Lab Assignment-04

ROLL: 2005535 | NAME: SAHIL SINGH | DATE: 09/02/22

QUES : Insert the values in the EMP table and run the following queries.

1. Display unique jobs from employee table.
2. List the details of the employees in ascending order of their salaries.
3. List the details of the employees in ascending order of the department and desc order of their jobs
4. List the emps who joined before 1981.
5. List the Empno, Ename, Sal, Daily Sal of all Employees in the ASC order of AnnSal.
6. List the empno, ename, sal, exp of all emps working for Mgr 7839
7. Display the details of the emps whose Comm. Is more than their sal.
8. List the emps in the asc order of Designation
9. List the emps along with their exp and daily sal is more than Rs.100
10. List the emps who are either 'CLERK' or 'ANALYST' in the desc order
11. List the emps who are working for the deptno 10 or 20
12. List the emps who are joined in the year 1981
13. List the emps who are joined in the month of AUG 1980
14. List the emps whose annul sal ranging from 22000 and 45000
15. List the emps those are having five characters in their names
16. List the enames those are starting with 's' and with fire character
17. List the emps those are having four chars and third char must be 'r'
18. List the 5 character names starting with 's' and ending w
19. List the emps who joined in January
20. List the emps who joined in the month of which second character is 'a'
21. List the Employees who joined in January
22. List the emps who joined in the month of Aug
23. List the emps who joined in 80's
24. List the Emps who does not belong to deptno 20
25. Find the avg salary of the emps working under manager

SOLUTION:

Data Insertion:

(EMP TABLE)

```
SQL> insert into emp values(7839, 'KING', 'PRESIDENT', null, to_date('17-11-1981','dd-mm-yyyy'), 5000, null, 10);

SQL> insert into emp values(7698, 'BLAKE', 'MANAGER', 7839, to_date('1-5-1981','dd-mm-yyyy'), 2850, null, 30);

SQL> insert into emp values(7782, 'CLARK', 'MANAGER', 7839, to_date('9-6-1981','dd-mm-yyyy'), 2450, null, 10);

SQL> insert into emp values(7566, 'JONES', 'MANAGER', 7839, to_date('2-4-1981','dd-mm-yyyy'), 2975, null, 20);

SQL> insert into emp values(7788, 'SCOTT', 'ANALYST', 7566, to_date('13-JUL-87','dd-mm-rr') - 85, 3000, null, 20);

SQL> insert into emp values(7902, 'FORD', 'ANALYST', 7566, to_date('3-12-1981','dd-mm-yyyy'), 3000, null, 20);
```

```

SQL> insert into emp values(7369, 'SMITH', 'CLERK', 7902, to_date('17-12-1980','dd-mm-yyyy'), 800, null, 20);

SQL> insert into emp values(7499, 'ALLEN', 'SALESMAN', 7698, to_date('20-2-1981','dd-mm-yyyy'), 1600, 300, 30);

SQL> insert into emp values(7521, 'WARD', 'SALESMAN', 7698, to_date('22-2-1981','dd-mm-yyyy'), 1250, 500, 30);

SQL> insert into emp values(7654, 'MARTIN', 'SALESMAN', 7698, to_date('28-9-1981','dd-mm-yyyy'), 1250, 1400, 30);

SQL> insert into emp values(7844, 'TURNER', 'SALESMAN', 7698, to_date('8-9-1981','dd-mm-yyyy'), 1500, 0, 30);

SQL> insert into emp values(7876, 'ADAMS', 'CLERK', 7788, to_date('13-JUL-87', 'dd-mm-rr') - 51, 1100, null, 20);

SQL> insert into emp values(7900, 'JAMES', 'CLERK', 7698, to_date('3-12-1981','dd-mm-yyyy'), 950, null, 30);

SQL> insert into emp values(7934, 'MILLER', 'CLERK', 7782, to_date('23-1-1982','dd-mm-yyyy'), 1300, null, 10);

```

```
SQL> select * from emp;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT		17-NOV-81	5000		10
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7934	MILLER	CLERK	7782	23-JAN-82	1300		10

```
14 rows selected.
```

Display unique jobs from employee table.

```
SQL> select distinct JOB from emp;
```

```

SQL> select distinct JOB from emp;

JOB
-----
CLERK
SALESMAN
PRESIDENT
MANAGER
ANALYST

```

List the details of the employees in ascending order of their salaries.

SQL> select \* from emp order by SAL;

SQL> select \* from emp order by SAL;

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7934	MILLER	CLERK	7782	23-JAN-82	1300		10
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20
7839	KING	PRESIDENT		17-NOV-81	5000		10

14 rows selected.

List the details of the employees in ascending order of the department and desc order of their jobs.

SQL> select \* from emp order by DEPTNO;

SQL> select \* from emp order by DEPTNO;

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7934	MILLER	CLERK	7782	23-JAN-82	1300		10
7839	KING	PRESIDENT		17-NOV-81	5000		10
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30

14 rows selected.

SQL> select \* from emp order by JOB DESC;

SQL> select \* from emp order by JOB DESC;

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7839	KING	PRESIDENT		17-NOV-81	5000		10
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7934	MILLER	CLERK	7782	23-JAN-82	1300		10
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20
7902	FORD	ANALYST	7566	03-DEC-81	3000		20

14 rows selected.

List the emps who joined before 1981.

```
SQL> select * from emp where extract(year from HIREDATE) < 1981;
```

```
SQL> select * from emp where extract(year from HIREDATE) < 1981;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK		7902 17-DEC-80	800		20

List the Empno, Ename, Sal, Daily Sal of all Employees in the ASC order of AnnSal.

```
SQL> select EMPNO, ENAME, SAL, (SAL/30) as DAILY_SAL, (SAL*12) as ANNSAL from emp order by (SAL*12);
```

```
SQL> select EMPNO, ENAME, SAL, (SAL/30) as DAILY_SAL, (SAL*12) as ANNSAL from emp order by (SAL*12);
```

EMPNO	ENAME	SAL	DAILY_SAL	ANNSAL
7369	SMITH	800	26.6666667	9600
7900	JAMES	950	31.6666667	11400
7876	ADAMS	1100	36.6666667	13200
7654	MARTIN	1250	41.6666667	15000
7521	WARD	1250	41.6666667	15000
7934	MILLER	1300	43.3333333	15600
7844	TURNER	1500	50	18000
7499	ALLEN	1600	53.3333333	19200
7782	CLARK	2450	81.6666667	29400
7698	BLAKE	2850	95	34200
7566	JONES	2975	99.1666667	35700
7902	FORD	3000	100	36000
7788	SCOTT	3000	100	36000
7839	KING	5000	166.666667	60000

14 rows selected.

List the empno, ename, sal, exp of all emps working for Mgr 7839.

```
SQL> select * from EMP where MGR=7839;
```

```
SQL> select * from EMP where MGR=7839;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7566	JONES	MANAGER	7839	02-APR-81	2975		20

Display the details of the emps whose Comm. Is more than their sal.

```
SQL> select * from EMP where COMM > SAL;
```

```
SQL> select * from EMP where COMM > SAL;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30

List the emps in the asc order of Designation.

```
SQL> select * from emp order by JOB;
```

```
SQL> select * from emp order by JOB;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7934	MILLER	CLERK	7782	23-JAN-82	1300		10
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7839	KING	PRESIDENT		17-NOV-81	5000		10
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30

```
14 rows selected.
```

List the emps along with their exp and daily sal is more than Rs.100

```
SQL> select EMPNO, ENAME, JOB, MGR, HIREDATE, SAL, COMM, DEPTNO, (SAL/30) as DAILY_SAL  
from emp where (SAL/30) > 100;
```

```
SQL> select * from emp where (SAL/30) > 100;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT		17-NOV-81	5000		10

List the emps who are either 'CLERK' or 'ANALYST' in the desc order.

```
SQL> select * from EMP where JOB in('CLERK','ANALYST') order by JOB desc;
```

```
SQL> select * from EMP where JOB in('CLERK','ANALYST') order by JOB desc;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7934	MILLER	CLERK	7782	23-JAN-82	1300		10
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20

```
6 rows selected.
```

List the emps who are working for the deptno 10 or 20.

```
SQL> select * from EMP where DEPTNO in(10,20);
```

```
SQL> select * from EMP where DEPTNO in(10,20);
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT		17-NOV-81	5000		10
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7934	MILLER	CLERK	7782	23-JAN-82	1300		10

```
8 rows selected.
```

List the emps who are joined in the year 1981.

```
SQL> select * from emp where extract(year from hiredate) = 1981;
```

```
SQL> select * from emp where extract(year from hiredate) = 1981;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT		17-NOV-81	5000		10
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7900	JAMES	CLERK	7698	03-DEC-81	950		30

```
10 rows selected.
```

List the emps who are joined in the month of AUG 1980.

```
SQL> select * from emp where (extract(year from hiredate) = 1980) and (extract(month from hiredate) = 8);
```

```
SQL> select * from emp where (extract(year from hiredate) = 1980) and (extract(month from hiredate) = 8);
```

```
no rows selected
```

List the emps whose annual sal ranging from 22000 and 45000.

```
SQL> select EMPNO,ENAME,JOB,MGR,HIREDATE,SAL,(SAL*12) as ANNSAL,COMM,DEPTNO from emp where (SAL*12) between 22000 and 45000;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	ANNSAL	COMM	DEPTNO
7698	BLAKE	MANAGER	7839	01-MAY-81	2850	34200	30	
7782	CLARK	MANAGER	7839	09-JUN-81	2450	29400	10	
7566	JONES	MANAGER	7839	02-APR-81	2975	35700	20	
7788	SCOTT	ANALYST	7566	19-APR-87	3000	36000	20	
7902	FORD	ANALYST	7566	03-DEC-81	3000	36000	20	

List the emps those are having five characters in their names.

```
SQL> select * from emp where length(ENAME)=5;
```

```
SQL> select * from emp where length(ENAME)=5;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7900	JAMES	CLERK	7698	03-DEC-81	950		30

```
8 rows selected.
```

List the enames those are starting with 's' and with fire character.

```
SQL> select * from emp where ENAME like 'S%';
```

SQL> select * from emp where ENAME like 'S%';							
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20
7369	SMITH	CLERK	7902	17-DEC-80	800		20

List the emps those are having four chars and third char must be 'r'.

```
SQL> select * from emp where length(ENAME) = 4 and (ENAME like '__r%');
```

SQL> select * from emp where length(ENAME) = 4 and (ENAME like '__r%');						
no rows selected						

List the 5 character names starting with 's' and ending 'w'.

```
SQL> select * from emp where length(ENAME) = 5 and (ENAME like 'S%' and ENAME like '%w');
```

SQL> select * from emp where length(ENAME) = 5 and (ENAME like 'S%' and ENAME like '%w');						
no rows selected						

List the emps who joined in January.

```
SQL> select * from emp where extract(month from hiredate) = 1;
```

SQL> select * from emp where extract(month from hiredate) = 1;							
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7934	MILLER	CLERK	7782	23-JAN-82	1300		10

List the emps who joined in the month of which second character is 'a'.

```
SQL> select * from emp where to_char(hiredate, 'MONTH') like '_A%';
```

SQL> select * from emp where to_char(hiredate, 'MONTH') like '_A%';							
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7934	MILLER	CLERK	7782	23-JAN-82	1300		10

List the Employees who joined in January.

```
SQL> select * from emp where extract(month from hiredate) = 1;
```

SQL> select * from emp where extract(month from hiredate) = 1;							
EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7934	MILLER	CLERK	7782	23-JAN-82	1300		10

List the emps who joined in the month of Aug.

```
SQL> select * from emp where extract(month from hiredate) = 8;
```

```
SQL> select * from emp where extract(month from hiredate) = 8;  
no rows selected
```

List the emps who joined in 80's.

```
SQL> select * from emp where extract(year from hiredate) between 1980 and 1989;
```

```
SQL> select * from emp where extract(year from hiredate) between 1980 and 1989;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT		17-NOV-81	5000		10
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7566	JONES	MANAGER	7839	02-APR-81	2975		20
7788	SCOTT	ANALYST	7566	19-APR-87	3000		20
7902	FORD	ANALYST	7566	03-DEC-81	3000		20
7369	SMITH	CLERK	7902	17-DEC-80	800		20
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7876	ADAMS	CLERK	7788	23-MAY-87	1100		20
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7934	MILLER	CLERK	7782	23-JAN-82	1300		10

14 rows selected.

List the Emps who does not belong to deptno 20.

```
SQL> select * from emp where DEPTNO != 20;
```

```
SQL> select * from emp where DEPTNO != 20;
```

EMPNO	ENAME	JOB	MGR	HIREDATE	SAL	COMM	DEPTNO
7839	KING	PRESIDENT		17-NOV-81	5000		10
7698	BLAKE	MANAGER	7839	01-MAY-81	2850		30
7782	CLARK	MANAGER	7839	09-JUN-81	2450		10
7499	ALLEN	SALESMAN	7698	20-FEB-81	1600	300	30
7521	WARD	SALESMAN	7698	22-FEB-81	1250	500	30
7654	MARTIN	SALESMAN	7698	28-SEP-81	1250	1400	30
7844	TURNER	SALESMAN	7698	08-SEP-81	1500	0	30
7900	JAMES	CLERK	7698	03-DEC-81	950		30
7934	MILLER	CLERK	7782	23-JAN-82	1300		10

9 rows selected.

Find the avg salary of the emps working under manager.

```
SQL> select AVG(SAL) as AVG_SAL from emp where JOB != 'PRESIDENT';
```

```
SQL> select AVG(SAL) as AVG_SAL from emp where JOB != 'PRESIDENT'  
2 ;  
  
AVG_SAL  
-----  
1848.07692
```