ASSIGNMENT -1

Q.1) TOTAL NUMBER OF EMPLOYEES??

select * from dept;

select count(*) from emp;

ANSWER
COUNT(*)

14

Download CSV

QUES 2.) Total Number of departments?

ANSWER .) select count(*) from dept;

COUNT(*)

4

Download CSV

QUES 3.) All the employees??

select ename from emp;

ENAME
KING
BLAKE
CLARK
JONES
SCOTT
FORD
SMITH
ALLEN
WARD
MARTIN
TURNER
ADAMS
JAMES
MILLER

Ques 4.) All The departments?

select dname from dept;

| DNAME | |
|------------|---|
| ACCOUNTING | ì |
| RESEARCH | 1 |
| SALES | (|
| OPERATIONS | 1 |

Ques 5.) Total salary paide for all employees??

Answer select sum(sal) from emp;

```
select *from emp;
describe emp;
select sum(sal) from emp;
```

SUM(SAL) 29025

Q 6.) Total Commission paid for all employees? select sum(comm) from emp;



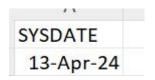
Q 7.) Which job Ttiles of the emplyees get Commission Paid??

select job as job_title,comm from emp where comm is not null;

| JOB_TITLE | COMM |
|-----------|------|
| SALESMAN | 300 |
| SALESMAN | 500 |
| SALESMAN | 1400 |
| SALESMAN | 0 |

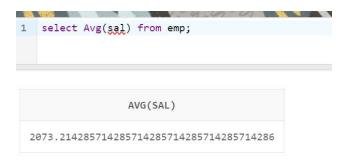
Ques.8) System Date ??

select sysdate from dual;



Ques.9) Average Salary Paid to all employees?

Ans .) select avg(sal) from emp;



Ques.10) How Many Employees are their in each department?

select d.dname, count(*) from emp e full outer join dept d on e.deptno = d.deptno group by d.dname;

| DNAME | COUNT(*) |
|------------|----------|
| RESEARCH | 5 |
| SALES | 6 |
| ACCOUNTING | 3 |
| OPERATIONS | 1 |

Ques.11.)) Total Salary of the Employees in each department?

select d.dname,sum(e.sal) from emp e full outer join dept d on e.deptno = d.deptno group by d.dname;

| DNAME | SUM(E.SAL) |
|------------|------------|
| RESEARCH | 10875 |
| SALES | 9400 |
| ACCOUNTING | 8750 |
| OPERATIONS | - |

or

select deptno, sum(sal)

from emp

group by deptno;

| DEPTNO | SUM(SAL) |
|--------|----------|
| 30 | 9400 |
| 10 | 8750 |
| 20 | 10875 |

Ques.12) How Many employees are their under each job Title??

select job,count(*) from emp group by job;

| ЈОВ | COUNT(*) |
|-----------|----------|
| ANALYST | 2 |
| CLERK | 4 |
| SALESMAN | 4 |
| MANAGER | 3 |
| PRESIDENT | 1 |

or

select ename, job, count(*)

from emp

group by ename, job

order by ename, job;

| | ENAME | JOB | COUNT(*) |
|---|--------|-----------|----------|
| | ADAMS | CLERK | 1 |
| | ALLEN | SALESMAN | 1 |
| | BLAKE | MANAGER | 1 |
| | CLARK | MANAGER | 1 |
| | FORD | ANALYST | 1 |
| | JAMES | CLERK | 1 |
| | JONES | MANAGER | 1 |
| | KING | PRESIDENT | 1 |
|) | MARTIN | SALESMAN | 1 |
| | MILLER | CLERK | 1 |
| ! | SCOTT | ANALYST | 1 |
| ı | SMITH | CLERK | 1 |
| ļ | TURNER | SALESMAN | 1 |
| | WARD | SALESMAN | 1 |
| i | | | |

13.) Average salary paid for each job title? select job, avg(sal) from emp group by job;

| 2 | select j | ob,avg(sal) from emp group by job; |
|---------------|----------|---|
| 3 | | |
| | JOR | AVG(SAL) |
| Al | NALYST | 3000 |
| CI | LERK | 1037.5 |
| SALESMAN 1400 | | |
| MANAGER | | 2758.333333333333333333333333333333333333 |
| PRESIDENT | | 5000 |

Ques 14.) Hiredate, day month for each employee? select ename, hiredate, to_char(hiredate,'YYYY'), to_char(hiredate,'MON'), to_char(hiredate,'DD')

from emp;

| ENAME | HIREDATE | YEAR | MONTH) | DATE |
|--------------|-----------|------|--------|------|
| KING | 17-Nov-81 | 1981 | NOV | 17 |
| BLAKE | 01-May-81 | 1981 | MAY | 1 |
| CLARK | 09-Jun-81 | 1981 | JUN | 9 |
| JONES | 02-Apr-81 | 1981 | APR | 2 |
| SCOTT | 19-Apr-87 | 1987 | APR | 19 |
| FORD | 03-Dec-81 | 1981 | DEC | 3 |
| SMITH | 17-Dec-80 | 1980 | DEC | 17 |
| ALLEN | 20-Feb-81 | 1981 | FEB | 20 |
| WARD | 22-Feb-81 | 1981 | FEB | 22 |
| MARTIN | 28-Sep-81 | 1981 | SEP | 28 |
| TURNER | 08-Sep-81 | 1981 | SEP | 8 |
| ADAMS | 23-May-87 | 1987 | MAY | 23 |
| JAMES | 03-Dec-81 | 1981 | DEC | 3 |
| MILLER | 23-Jan-82 | 1982 | JAN | 23 |

Ques 15.) SORT THE EMPLOYEES DEPARTMENT WISE?

select dname, ename from emp full outer join dept on emp. dept. dept. o order by dname asc;

| | Section Section |
|------------|-----------------|
| DNAME | ENAME |
| ACCOUNTING | MILLER |
| ACCOUNTING | CLARK |
| ACCOUNTING | KING |
| OPERATIONS | Ē |
| RESEARCH | JONES |
| RESEARCH | FORD |
| RESEARCH | SMITH |

| RESEARCH | FORD |
|----------|--------|
| RESEARCH | SMITH |
| RESEARCH | ADAMS |
| RESEARCH | SCOTT |
| SALES | JAMES |
| SALES | TURNER |
| SALES | MARTIN |
| SALES | WARD |

| SALES | ALLEN |
|-------|-------|
| SALES | BLAKE |

Ques 16.) Sort all the employees based on their JOB title?

SELECT ename ,job FROM emp ORDER BY ename ASC, job ASC

| ENAME | JOB | |
|--------------|-----------|--|
| ADAMS | CLERK | |
| ALLEN | SALESMAN | |
| BLAKE | MANAGER | |
| CLARK | MANAGER | |
| FORD | ANALYST | |
| JAMES | CLERK | |
| JONES | MANAGER | |
| KING | PRESIDENT | |
| MARTIN | SALESMAN | |
| MILLER | CLERK | |
| SCOTT | ANALYST | |
| SMITH | CLERK | |
| TURNER | SALESMAN | |
| WARD | SALESMAN | |
| | | |

Ques 17.) Sort the employees based on the decending order of their salary?

SELECT empno, ename, sal FROM emp ORDER BY sal desc;

| EMPNO | ENAME | SAL |
|-------|--------------|------|
| 7839 | KING | 5000 |
| 7788 | SCOTT | 3000 |
| 7902 | FORD | 3000 |
| 7566 | JONES | 2975 |
| 7698 | BLAKE | 2850 |
| 7782 | CLARK | 2450 |
| 7499 | ALLEN | 1600 |
| 7844 | TURNER | 1500 |
| 7934 | MILLER | 1300 |
| 7654 | MARTIN | 1250 |
| 7521 | WARD | 1250 |
| 7876 | ADAMS | 1100 |
| 7900 | JAMES | 950 |
| 7369 | SMITH | 800 |

Ques 18.) Sort the employees Asscending order of their department and descending order of their salary?

select e.ename,d.dname,e.sal from emp e full outer join dept d on e.deptno=d.deptno order by d.dname,sal desc;

| ENAME | DNAME | SAL |
|--------|------------|------|
| KING | ACCOUNTING | 5000 |
| CLARK | ACCOUNTING | 2450 |
| MILLER | ACCOUNTING | 1300 |
| - | OPERATIONS | - |
| SCOTT | RESEARCH | 3000 |
| FORD | RESEARCH | 3000 |
| JONES | RESEARCH | 2975 |

| ADAMS | RESEARCH | 1100 |
|--------|----------|------|
| SMITH | RESEARCH | 800 |
| BLAKE | SALES | 2850 |
| ALLEN | SALES | 1600 |
| TURNER | SALES | 1500 |
| WARD | SALES | 1250 |
| MARTIN | SALES | 1250 |
| JAMES | SALES | 950 |

or

SELECT ename, deptno, sal FROM emp ORDER BY deptno asc, sal desc;

| ENAME | DEPTNO | SAL |
|--------------|--------|------|
| KING | 10 | 5000 |
| CLARK | 10 | 2450 |
| MILLER | 10 | 1300 |
| SCOTT | 20 | 3000 |
| FORD | 20 | 3000 |
| JONES | 20 | 2975 |
| ADAMS | 20 | 1100 |
| SMITH | 20 | 800 |
| BLAKE | 30 | 2850 |
| ALLEN | 30 | 1600 |
| TURNER | 30 | 1500 |
| WARD | 30 | 1250 |
| MARTIN | 30 | 1250 |
| JAMES | 30 | 950 |

Ques 19) How Many employees have their name with 6 character? select count(ename) from emp where length(ename)=6;

| COUNT(ENAME) |
|--------------|
| 3 |

TURNER

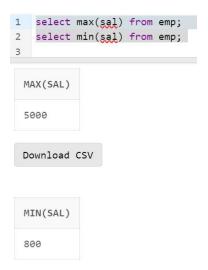
MILLER

```
SELECT ename
FROM emp
WHERE length(ename)=6;

ENAME
MARTIN
```

Ques 20.) Maximum and minimum salary paid? select max(sal) from emp;

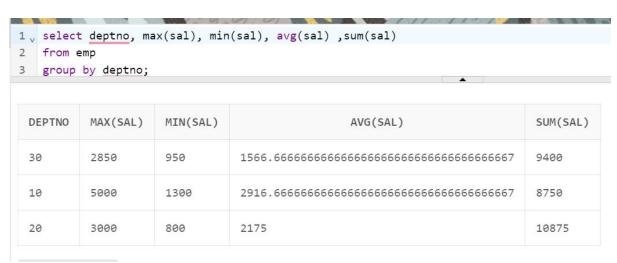
select min(sal) from emp;



Ques 21.) Maximum, minimum, average, sum salary paid to each department? select dname, max(sal), min(sal), sum(sal), avg(sal) from emp e full outer join dept d on e.deptno=d.deptno group by d.dname;

| DNAME | MAX(SAL) | MIN(SAL) | SUM(SAL) | AVG(SAL) |
|------------|----------|----------|----------|--|
| RESEARCH | 3000 | 800 | 10875 | 2175 |
| SALES | 2850 | 950 | 9400 | 1566.6666666666666666666666666666666666 |
| ACCOUNTING | 5000 | 1300 | 8750 | 2916.66666666666666666666666666666666666 |
| OPERATIONS | - | - | - | - |

or



Ques 22.) SORT the employees based on their hiredates?

select ename, hiredate from emp order by hiredate;

| ENAME | HIREDATE |
|--------|-----------|
| SMITH | 17-Dec-80 |
| ALLEN | 20-Feb-81 |
| WARD | 22-Feb-81 |
| JONES | 02-Apr-81 |
| BLAKE | 01-May-81 |
| CLARK | 09-Jun-81 |
| TURNER | 08-Sep-81 |
| MARTIN | 28-Sep-81 |
| KING | 17-Nov-81 |
| FORD | 03-Dec-81 |
| JAMES | 03-Dec-81 |
| MILLER | 23-Jan-82 |
| SCOTT | 19-Apr-87 |
| ADAMS | 23-May-87 |
| | |

Ques 23.) Employees who joined LATEST?

select ename, hiredate from emp where hiredate = (select max(hiredate) from emp);

| ENAME | HIREDATE |
|-------|-----------|
| ADAMS | 23-MAY-87 |

Ques 24.) Who is the latest employees in the organization based on their hiredate? select ename, hiredate from emp where hiredate = (select min(hiredate) from emp);

| ENAME | HIREDATE |
|-------|-----------|
| SMITH | 17-DEC-80 |

Ques 25.) Sort the employees based on hire year (descending) and department number (Ascending)?

select e.ename, e.hiredate, d.dname

from emp e

full outer join dept d on e.deptno=d.deptno

order by to_char(e.hiredate,'YYYY') desc,d.dname;

| ENAME HIREDATE | | DNAME |
|----------------|-----------|-------------------|
| - | 4 | OPERATIONS |
| SCOTT | 19-Apr-87 | RESEARCH |
| ADAMS | 23-May-87 | RESEARCH |
| MILLER | 23-Jan-82 | ACCOUNTING |
| CLARK | 09-Jun-81 | ACCOUNTING |
| KING | 17-Nov-81 | ACCOUNTING |
| JONES | 02-Apr-81 | RESEARCH |
| FORD | 03-Dec-81 | RESEARCH |
| JAMES | 03-Dec-81 | SALES |
| TURNER | 08-Sep-81 | SALES |
| MARTIN | 28-Sep-81 | SALES |
| WARD | 22-Feb-81 | SALES |
| ALLEN | 20-Feb-81 | SALES |
| BLAKE | 01-May-81 | SALES |
| SMITH | 17-Dec-80 | RESEARCH |

QUES.26) Emp who get salaries greater than or equal to avg sal of the emp?

ANS.) select ename, sal from emp where sal>= (select avg(sal) from emp);

| ENAME | SAL |
|-------|------|
| KING | 5000 |
| BLAKE | 2850 |
| CLARK | 2450 |
| JONES | 2975 |
| SCOTT | 3000 |
| FORD | 3000 |

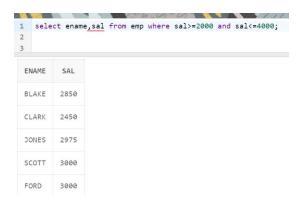
QUES .27) Employees who get sal less than or equal to avg sal of emp?

ANS) Select ename, sal from emp where sal<= (select avg(sal) from emp);

| ENAME | SAL |
|--------|------|
| SMITH | 800 |
| ALLEN | 1600 |
| WARD | 1250 |
| MARTIN | 1250 |
| TURNER | 1500 |
| ADAMS | 1100 |
| JAMES | 950 |
| MILLER | 1300 |

QUES.28) employees get sal b/w 2000 and 4000??

ANS)



QUES.29) Which employees get highest and lowest sal?

select ename, sal from emp where sal=(select max(sal) from emp) union select ename, sal from emp where sal=(select min(sal) from emp);

| ENAME | SAL |
|-------|------|
| KING | 5000 |
| SMITH | 800 |

QUES.30) How many gifts need buy next month?

select count(*) from emp where to_char(hiredate, 'mm') =
to_char(add_months(current_date, 1), 'mm');



Oracle SQL Sessions

Assignment #1

Download the script for creating EMP and DEPT tables from the **https://livesql.oracle.com/** which we are already aware. Create the tables and insert by running the contents of the script.

Write SQL for the below mentioned requirements to extract:

- 1. total number of employees
- 2. total number of departments
- 3. all the employees
- 4. all the departments
- 5. total salary paid for all employees.
- 6. total commission paid to all employees.
- 7. Which job titles of the employees get commission paid.
- 8. System date
- 9. Average salary paid to all employees.
- 10. How many employees are there in each department?
- 11. Total salary of the employees in each department
- 12. How many employees are there under each job title?
- 13. Average salary paid for each job title.
- 14. hire day, month, and year for each employee.
- 15. Sort the employee department wise.
- 16. Sort the employee based on their job titles.
- 17. Sort the employee based on descending order of their salaries.
- 18. Sort the employee ascending order of their department and descending order of their salary.
- 19. How many employees have their name with 6 characters.
- 20. Maximum and minimum salary paid.
- 21. Maximum, minimum, average and sum of salary paid under each department.
- 22. Sort the employee based on their hire date.
- 23. Employee who joined latest
- 24. Who is the oldest employee in the organization based on their hire date?
- 25. Sort the employee based on their hire year (descending) and department (ascending)
- 26. Employees who get salaries greater than or equal to the average salary of employees.
- 27. Employees who get salary less than or equal to average salary of employees.
- 28. Employees get salaries between 2000 and 4000.
- 29. Which employees get the highest and lowest salary?
- 30. We need to celebrate the joining month of the employees. We plan to buy a gift for each of them. How many gifts do I need to buy for next month?