**ASSIGNMENT 4**

**1.Display empno, ename, sal in ascending order of salary from emp table.**

SELECT empno, ename, sal FROM emp

ORDER BY sal ASC;

**2. List ename, sal, job and deptno in descending order of deptno and salary.**

SELECT ename, sal, job, deptno FROM emp

ORDER BY deptno DESC, sal DESC;

3. List ename, sal, PF, HRA, DA and GROSS in ascending order of Gross. [Here PF is 12% of sal, HRA is 15% of sal, DA is 90% of sal and GROSS is sum of sal, PF, HRA, DA]

SELECT ENAME, SAL, 0.12\*SAL as PF, sal \* 0.15 as HRA, sal \* 0.9 as DA, sal+(sal\*0.12)+(sal\*0.15)+(sal\*0.9) as GROSS

FROM EMP

ORDER BY GROSS ASC;

**4. List the maximum salary of employee working as a salesman.**

SELECT MAX(sal) AS maximum\_salary FROM emp

WHERE job = 'SALESMAN';

**5. List the average salary and no of employees working in dept 20.**

Select avg(sal) , count(empno) from emp where deptno=20;

**6. Display deptno, no. of employees in each department.**

Select deptno, count(empno) as no\_of\_employees from emp

group by deptno;

**7. List deptno, total salary payable in each department.**

Select deptno, sum(sal) from emp group by deptno;

**8. List jobs and the no of employees in each job in descending order of no. of employees.**

SELECT job, COUNT(empno) AS no\_of\_employees FROM emp

GROUP BY job

ORDER BY no\_of\_employees DESC;

**9. List total, maximum, minimum and average salary of employee’s job wise.**

SELECT

    job, SUM(sal) AS total\_salary, MAX(sal) AS max\_salary, MIN(sal) AS min\_salary, AVG(sal) AS avg\_salary

FROM emp GROUP BY job;

**10. List the average salary for each job excluding manager.**

SELECT job, AVG(sal) AS average\_salary

FROM emp

WHERE job != 'MANAGER'

GROUP BY job;

**11. List total, maximum, minimum and average salary of employee’s job-wise for dept no. 20 only.**

SELECT job,

    SUM(sal) AS total\_salary,MAX(sal) AS max\_salary,MIN(sal) AS min\_salary,AVG(sal) AS avg\_salary

FROM emp

WHERE deptno = 20 GROUP BY job;

**12. List average monthly salary for each job within department.**

Select job, deptno,avg(sal) from emp

Group by deptno, job;

**13. List average salary for all departments where more than 5 people are working.**

Select deptno,avg(sal) from emp GROUP BY DEPTNO

Having count(\*)>5;

**14. List jobs of all employees where maximum salary is greater than or equal to 5000.**

SELECT job FROM emp

GROUP BY job

HAVING MAX(sal) >= 5000;

**15. Display total, maximum, minimum and average salaries of employee’s job-wise for department 20 and list only those rows having average salary greater than 1000.**

SELECT

    job,

    SUM(sal) AS total\_salary,

    MAX(sal) AS max\_salary,

    MIN(sal) AS min\_salary,

    AVG(sal) AS avg\_salary

FROM emp

WHERE deptno = 20

GROUP BY job

HAVING AVG(sal) > 1000;

**16. Display total, maximum, minimum and average salaries of employee’s job-wise for department 20 and list only those rows having average salary greater than 1000 and arrange the above output in descending order of total salary.**

SELECT

    job,

    SUM(sal) AS total\_salary,

    MAX(sal) AS max\_salary,

    MIN(sal) AS min\_salary,

    AVG(sal) AS avg\_salary

FROM emp

WHERE deptno = 20

GROUP BY job

HAVING AVG(sal) > 1000

ORDER BY total\_salary DESC;

**17. Calculates the average of the maximum salaries of all the departments from emp table.**

SELECT AVG(max(sal)) from emp group by deptno;

**18. Display the standard deviation (sd) of salary for each job type having sd >0 from emp table.**

SELECT job, STDDEV(sal) AS standard\_deviation\_salary

FROM emp

GROUP BY job

HAVING STDDEV(sal) > 0;

**19. Count no. of employees whose commission is greater than 300.**

SELECT COUNT(\*) AS employee\_count

FROM emp

WHERE COMM > 300;

**20. Display sum of commission for each department after substituting 100 in commission if it is NULL and order the result in descending order of department.**

SELECT deptno, SUM(NVL(COMM, 100)) AS total\_commission

FROM emp

GROUP BY deptno

ORDER BY deptno DESC;

**21. Display no. of manager present in employee table.**

SELECT COUNT(\*) AS manager\_count

FROM emp

WHERE job = 'Manager';

Or

SELECT COUNT(DISTINCT MGR) AS num\_managers

FROM Emp;

**22. List of employee names and commissions, substituting "Not Applicable" if the employee receives no commission for thosewhose name has contained a “M” and order this result as descending order of name.**

SELECT ename, NVL(TO\_CHAR(comm), 'Not Applicable') AS commission

FROM emp

WHERE ename LIKE '%M%'

ORDER BY ename DESC;

**23. List names, salary and commission of employees whose name has contained a “M” when the income of some employees is made up of salary plus commission, or just salary, depending on whether the comm column of employees is null or not and order the result as ascending order of name.**

SELECT ENAME AS "Employee Name", NVL(SAL+COMM, SAL) AS "Salary" , NVL(COMM, 0) AS "Commission"

FROM EMP

WHERE UPPER(ENAME) LIKE '%M%'

ORDER BY ENAME ASC;

**24. Display the name of the employee where first character of each name is capital one.**

SELECT INITCAP(ENAME) AS ENAME from EMP;

SELECT ename

FROM emp

WHERE UPPER(SUBSTR(ename, 1, 1)) = SUBSTR(ename, 1, 1);

**25. Select the substring of 3 characters long starting form 2nd character of job type from emp table when job is ‘SALESMAN’**.

SELECT SUBSTR(JOB, 2, 3) AS substring\_job

FROM EMP

WHERE JOB = 'SALESMAN';