Assignment 2

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Subject: DBMS Lab. Assignment
Dept: Information Technology (UG 2)

1. Show the details of all employees.

```
SELECT * FROM EMP1;
```

2. Show the department no. and the name of all departments.

```
SELECT DISTINCT DEPTNO, JOB FROM EMP1;
```

3. Display the department no, the employee no and name where department no should be in ascending order.

```
SELECT DEPTNO, EMPNO, ENAME FROM EMP ORDER BY DEPTNO;
```

4. Show all available jobs in department no 20.

```
SELECT JOB FROM EMP1 WHERE DEPTNO = 20;
```

5. Find distinct names of the employees who worked as an “ANALYST” and have the name containing “AM”.

```
SELECT DISTINCT ENAME FROM EMP1 WHERE JOB = 'ANALYST' AND ENAME LIKE '%AM%';
```

6. Show the name, Annual Salary, and department no of all employees. Annual Salary = 12xSalary.

```
SELECT ENAME, SAL*12 AS ANNUAL_SALARY, DEPTNO FROM EMP1;
```

7. List all the cities where at least one department is located.

```
SELECT loc FROM dept;
```

8. Show the name, hire date and salary of those employees who are not a manager but got height salary.

```
SELECT ENAME, HIREDATE, SAL FROM EMP1 WHERE JOB <> 'MANAGER' AND SAL > (SELECT MAX(SAL) FROM EMP1);
```

9. Find the department(s) with the highest average salary.

```
SELECT dname FROM dept WHERE deptno IN (SELECT DEPTNO FROM EMP1 GROUP BY DEPTNO HAVING AVG(SAL) = (SELECT MAX(AVG(SAL)) FROM EMP1 GROUP BY DEPTNO));
```

10. Find the list of employees, who have joined before 1st April 1987.

```
SELECT * FROM EMP1 WHERE HIREDATE < '1-APR-1987';
```

11. Display all employee names in title case and length of the name.

```
SELECT INITCAP(ENAME) AS NAME, LENGTH(ENAME) AS LENGTH FROM EMP1;
```

12. Find the list of employees who are working as either manager or analyst with a salary range from 2000 to 4000 without any commission.

```
SELECT * FROM EMP1 WHERE JOB IN ('MANAGER', 'ANALYST') AND SAL BETWEEN 2000 AND 4000;
```

13. Find all employees who joined the company before their manager.

```
SELECT E.* FROM EMP1 E, EMP1 M WHERE E.MGR = M.EMPNO AND M.HIREDATE > E.HIREDATE;
```

14. Find the job with the lowest average salary.

```
SELECT JOB FROM EMP1 GROUP BY JOB HAVING AVG(SAL) = (SELECT MIN(AVG(SAL)) FROM EMP1 GROUP BY JOB);
```

15. Display the name, job, and hire date for employees whose salary is greater than the highest salary in the SALES department.

```
SELECT ENAME, JOB, HIREDATE FROM EMP1 WHERE SAL >
(SELECT MAX(SAL) FROM EMP1 WHERE DEPTNO = (SELECT
deptno FROM dept WHERE dname = 'SALES'));
```

16. Find the employees who earn a salary greater than the average salary for their department. Sort in department number.

```
SELECT E.* FROM EMP1 E, (SELECT DEPTNO, AVG(SAL)
AS AVERAGE FROM EMP1 GROUP BY DEPTNO) A WHERE
E.DEPTNO = A.DEPTNO AND E.SAL > A.AVERAGE ORDER
BY E.DEPTNO;
```

17. Display the name, job, department name and salary grade for all the employees.

```
SELECT E.ENAME, E.JOB, D.DNAME, S.GRADE FROM EMP1
E, DEPT D, SALGRADE S WHERE E.DEPTNO = D.DEPTNO
AND E.SAL BETWEEN S.LOSAL AND S.HISAL;
```

18. Find the employees who earn the highest salary in each job type sort in descending salary order.

```
SELECT * FROM EMP1 WHERE (JOB, SAL) IN (SELECT
JOB, MAX(SAL) FROM EMP1 GROUP BY JOB) ORDER BY
SAL DESC;
```

19. Find the most experienced employees in each job type. Order by hire date.

```
SELECT * FROM EMP1 WHERE (JOB, HIREDATE) IN
(SELECT JOB, MIN(HIREDATE) FROM EMP1 GROUP BY
JOB);
```

20. Display the department that has no employees (Using set operators).

```
SELECT dname FROM dept WHERE deptno IN (SELECT
deptno FROM dept MINUS SELECT DEPTNO FROM EMP1);
```

21. Find the department that has a smallest total salary. Departmental total salary = sum of all salary of that department.

```
SELECT dname FROM dept WHERE deptno = (SELECT
DEPTNO FROM EMP1 GROUP BY DEPTNO HAVING SUM(SAL)
= (SELECT MIN(SUM(SAL)) FROM EMP1 GROUP BY
DEPTNO));
```

22. Find the employees who are either salesman or Analyst but have an experience of over 10 years

```
SELECT * FROM EMP1 WHERE JOB IN ('ANALYST',
'SALESMAN') AND ((SYSDATE - HIREDATE) > 10*365);
```

23. Find the list of employees who joined in any year except the month of June.

```
SELECT * FROM EMP1 WHERE HIREDATE NOT LIKE '%-
JUN-%';
```

24. Find the list of the department where at least two employees are working and their salary range from 2000 to 4000.

```
SELECT dname FROM dept D, (SELECT DEPTNO,
COUNT(*) FROM EMP1 WHERE SAL BETWEEN 2000 AND
4000 GROUP BY DEPTNO HAVING COUNT(*) > 1) E WHERE
D.DEPTNO = E.DEPTNO;
```

25. Find all the employees those who are directly working under the President of the company.

```
SELECT * FROM EMP1 E, (SELECT EMPNO FROM EMP1
WHERE JOB = 'PRESIDENT') P WHERE E.MGR = P.EMPNO
```