**MCAC104**

**DATABASE SYSTEM**

**ASSIGNMENT 1**

**SUBMITTED BY**

**GAURAV**

**MCA(1st SEM)**

**Query1. Write a query to display name, job, hiredate and employee number for each employee with employee number appearing first.**

mysql> SELECT EMPNO,ENAME,JOB,HIREDATE FROM EMP;

+-------+--------+-----------+------------+

| EMPNO | ENAME | JOB | HIREDATE |

+-------+--------+-----------+------------+

| 7369 | SMITH | CLERK | 1980-12-17 |

| 7499 | ALLEN | SALESMAN | 1981-02-20 |

| 7521 | ward | SALESMAN | 1981-02-22 |

| 7566 | JONES | MANAGER | 1981-04-02 |

| 7654 | MARTIN | SALESMAN | 1981-09-28 |

| 7698 | BLAKE | MANAGER | 1981-05-01 |

| 7782 | CLARK | MANAGER | 1981-06-09 |

| 7788 | SCOTT | ANALYST | 1982-12-09 |

| 7839 | KING | PRESIDENT | 1981-11-17 |

| 7844 | TURNER | SALESMAN | 1981-09-08 |

| 7876 | ADAMS | CLERK | 1983-01-12 |

| 7900 | JAMES | CLERK | 1981-12-03 |

| 7902 | FORD | ANALYST | 1981-12-03 |

| 7934 | MILLER | CLERK | 1982-01-23 |

+-------+--------+-----------+------------+

14 rows in set (0.00 sec)

**Query2. Write a query to display unique jobs from the employee table.**

mysql> SELECT DISTINCT(JOB) FROM EMP;

+-----------+

| JOB |

+-----------+

| CLERK |

| SALESMAN |

| MANAGER |

| ANALYST |

| PRESIDENT |

+-----------+

5 rows in set (0.00 sec)

**Query3. Write a query to display name concatenated by a job separated by a comma.**

mysql> SELECT CONCAT(ENAME," , ",JOB) FROM EMP;

+-------------------------+

| CONCAT(ENAME," , ",JOB) |

+-------------------------+

| SMITH , CLERK |

| ALLEN , SALESMAN |

| ward , SALESMAN |

| JONES , MANAGER |

| MARTIN , SALESMAN |

| BLAKE , MANAGER |

| CLARK , MANAGER |

| SCOTT , ANALYST |

| KING , PRESIDENT |

| TURNER , SALESMAN |

| ADAMS , CLERK |

| JAMES , CLERK |

| FORD , ANALYST |

| MILLER , CLERK |

+-------------------------+

14 rows in set (0.00 sec)

**Query4. Write a query to display the name and salary of employees earning more than $2850.**

mysql> SELECT ENAME ,SAL FROM EMP WHERE SAL>2850;

+-------+---------+

| ENAME | SAL |

+-------+---------+

| JONES | 2975.00 |

| SCOTT | 3000.00 |

| KING | 5000.00 |

| FORD | 3000.00 |

+-------+---------+

4 rows in set (0.00 sec)

**Quer5. Write a query to display the name and department number for employee number 7900.**

mysql> SELECT ENAME,DEPTNO FROM EMP WHERE EMPNO=7900;

+-------+--------+

| ENAME | DEPTNO |

+-------+--------+

| JAMES | 30 |

+-------+--------+

1 row in set (0.00 sec)

**Query6. Write a query to display the name and salary of all employees whose salary is not in the range of $1500 and $2850.**

mysql> SELECT ENAME,SAL FROM EMP WHERE SAL NOT BETWEEN 1500 AND 2850;

+--------+---------+

| ENAME | SAL |

+--------+---------+

| SMITH | 800.00 |

| ward | 1250.00 |

| JONES | 2975.00 |

| MARTIN | 1250.00 |

| SCOTT | 3000.00 |

| KING | 5000.00 |

| ADAMS | 1100.00 |

| JAMES | 950.00 |

| FORD | 3000.00 |

| MILLER | 1300.00 |

+--------+---------+

10 rows in set (0.00 sec)

**Query7. Write a query to display the name and department number of all employees in departments 10 and 30 in alphabetical order by name.**

mysql> SELECT ENAME,DEPTNO FROM EMP WHERE DEPTNO IN (10,30) ORDER BY ENAME ASC;

+--------+--------+

| ENAME | DEPTNO |

+--------+--------+

| ALLEN | 30 |

| BLAKE | 30 |

| CLARK | 10 |

| JAMES | 30 |

| KING | 10 |

| MARTIN | 30 |

| MILLER | 10 |

| TURNER | 30 |

| ward | 30 |

+--------+--------+

9 rows in set (0.00 sec)

**Query8. Write a query to display the name and salary of employees who earned more than $1500 and are in department number 10 or 30.**

mysql> SELECT ENAME,SAL FROM EMP WHERE SAL > 1500 AND DEPTNO=10 OR DEPTNO=30;

+--------+---------+

| ENAME | SAL |

+--------+---------+

| ALLEN | 1600.00 |

| ward | 1250.00 |

| MARTIN | 1250.00 |

| BLAKE | 2850.00 |

| CLARK | 2450.00 |

| KING | 5000.00 |

| TURNER | 1500.00 |

| JAMES | 950.00 |

+--------+---------+

8 rows in set (0.00 sec)

**Query9. Write a query to display the name and hire date of every employee who was hired in 1981.**

mysql> SELECT ENAME,HIREDATE FROM EMP WHERE YEAR(HIREDATE)=1981;

+--------+------------+

| ENAME | HIREDATE |

+--------+------------+

| ALLEN | 1981-02-20 |

| ward | 1981-02-22 |

| JONES | 1981-04-02 |

| MARTIN | 1981-09-28 |

| BLAKE | 1981-05-01 |

| CLARK | 1981-06-09 |

| KING | 1981-11-17 |

| TURNER | 1981-09-08 |

| JAMES | 1981-12-03 |

| FORD | 1981-12-03 |

+--------+------------+

10 rows in set (0.00 sec)

**Query10. Write a query to display the name and job of all employees who do not have a manager.**

mysql> SELECT ENAME,JOB FROM EMP WHERE MGR IS NULL;

+-------+-----------+

| ENAME | JOB |

+-------+-----------+

| KING | PRESIDENT |

+-------+-----------+

1 row in set (0.00 sec)

**Query11. Write a query to display the name, salary and commission for all employees who earn commission. Sort the data in descending order of salary.**

mysql> SELECT ENAME,SAL,COMM FROM EMP WHERE COMM IS NOT NULL ORDER BY SAL DESC;

+--------+---------+---------+

| ENAME | SAL | COMM |

+--------+---------+---------+

| ALLEN | 1600.00 | 300.00 |

| TURNER | 1500.00 | 0.00 |

| ward | 1250.00 | 500.00 |

| MARTIN | 1250.00 | 1400.00 |

+--------+---------+---------+

4 rows in set (0.00 sec)

**Query12. Write a query to display the names of all employees where the third letter of their name is A.**

mysql> SELECT ENAME FROM EMP WHERE ENAME LIKE '\_\_A%';

+-------+

| ENAME |

+-------+

| BLAKE |

| CLARK |

| ADAMS |

+-------+

3 rows in set (0.00 sec)

**Query13. Write a query to display the names of all employees that have two R's or A's in their name and are in department number 30 or their manager is 7788.**

mysql> SELECT ENAME FROM EMP WHERE (ENAME LIKE '%R%R%' OR ENAME LIKE '%A%A%') AND (DEPTNO=30 OR MGR=7788);

+--------+

| ENAME |

+--------+

| TURNER |

| ADAMS |

+--------+

2 rows in set (0.00 sec)

**Query14. Write a query to display the name, job and salary of all employees whose job is clerk or analyst and their salary are not equal to 1000, 3000 or 5000.**

mysql> SELECT ENAME,JOB,SAL FROM EMP WHERE JOB IN ('CLERK','ANALYST') AND SAL NOT IN (1000,3000,5000);

+--------+-------+---------+

| ENAME | JOB | SAL |

+--------+-------+---------+

| SMITH | CLERK | 800.00 |

| ADAMS | CLERK | 1100.00 |

| JAMES | CLERK | 950.00 |

| MILLER | CLERK | 1300.00 |

+--------+-------+---------+

4 rows in set (0.00 sec)

**Query15. Write a query to display the name, salary and commission of all employees whose commission amount is greater than their salary increased by 5%.**

mysql> SELECT ENAME , SAL , COMM FROM EMP WHERE COMM > SAL\*1.05;

+--------+---------+---------+

| ENAME | SAL | COMM |

+--------+---------+---------+

| MARTIN | 1250.00 | 1400.00 |

+--------+---------+---------+

1 row in set (0.00 sec)

**Query16. Write a query to display a current date.**

mysql> SELECT CURDATE();

+------------+

| CURDATE() |

+------------+

| 2023-10-15 |

+------------+

1 row in set (0.00 sec)

**Query17. Write a query to display employee number, name, salary, salary increased by 15% expressed as a whole number.**

mysql> SELECT EMPNO,ENAME,SAL ,ROUND(SAL\*1.15) AS INC\_SAL FROM EMP;

+-------+--------+---------+---------+

| EMPNO | ENAME | SAL | INC\_SAL |

+-------+--------+---------+---------+

| 7369 | SMITH | 800.00 | 920 |

| 7499 | ALLEN | 1600.00 | 1840 |

| 7521 | ward | 1250.00 | 1438 |

| 7566 | JONES | 2975.00 | 3421 |

| 7654 | MARTIN | 1250.00 | 1438 |

| 7698 | BLAKE | 2850.00 | 3278 |

| 7782 | CLARK | 2450.00 | 2818 |

| 7788 | SCOTT | 3000.00 | 3450 |

| 7839 | KING | 5000.00 | 5750 |

| 7844 | TURNER | 1500.00 | 1725 |

| 7876 | ADAMS | 1100.00 | 1265 |

| 7900 | JAMES | 950.00 | 1093 |

| 7902 | FORD | 3000.00 | 3450 |

| 7934 | MILLER | 1300.00 | 1495 |

+-------+--------+---------+---------+

14 rows in set (0.00 sec)

**Query19.Write a query to display the following for each employee:-**

**<ename> earns <salary> monthly but wants <3 times salary>. Label the column as Dream Salary.**

mysql> SELECT CONCAT(ENAME,' EARNS ',SAL,' MONTHLY BUT WANTS ',SAL \* 3) AS 'DREAM SALARY' FROM EMP;

+------------------------------------------------+

| DREAM SALARY |

+------------------------------------------------+

| SMITH EARNS 800.00 MONTHLY BUT WANTS 2400.00 |

| ALLEN EARNS 1600.00 MONTHLY BUT WANTS 4800.00 |

| ward EARNS 1250.00 MONTHLY BUT WANTS 3750.00 |

| JONES EARNS 2975.00 MONTHLY BUT WANTS 8925.00 |

| MARTIN EARNS 1250.00 MONTHLY BUT WANTS 3750.00 |

| BLAKE EARNS 2850.00 MONTHLY BUT WANTS 8550.00 |

| CLARK EARNS 2450.00 MONTHLY BUT WANTS 7350.00 |

| SCOTT EARNS 3000.00 MONTHLY BUT WANTS 9000.00 |

| KING EARNS 5000.00 MONTHLY BUT WANTS 15000.00 |

| TURNER EARNS 1500.00 MONTHLY BUT WANTS 4500.00 |

| ADAMS EARNS 1100.00 MONTHLY BUT WANTS 3300.00 |

| JAMES EARNS 950.00 MONTHLY BUT WANTS 2850.00 |

| FORD EARNS 3000.00 MONTHLY BUT WANTS 9000.00 |

| MILLER EARNS 1300.00 MONTHLY BUT WANTS 3900.00 |

+------------------------------------------------+

14 rows in set (0.00 sec)

**Query20.Write a query to display the employees name with the first letter capitalized and all other letters lower case and length of their name for all employees whose name start with J, A and M.**

mysql> SELECT CONCAT(SUBSTR(ENAME,1,1),LCASE(SUBSTR(ENAME,2,LENGTH(ENAME)-1))) AS NAME,LENGTH(ENAME) AS LENGTH FROM EMP WHERE SUBSTR(ENAME,1,1) IN ('J','A','M');

+--------+--------+

| NAME | LENGTH |

+--------+--------+

| Allen | 5 |

| Jones | 5 |

| Martin | 6 |

| Adams | 5 |

| James | 5 |

| Miller | 6 |

+--------+--------+

6 rows in set (0.00 sec)

**Query21. Write a query to display the name, department name, department number for all employees.**

mysql> SELECT EMP.ENAME ,DEPT.DNAME,EMP.DEPTNO FROM EMP JOIN DEPT ON EMP.DEPTNO=DEPT.DEPTNO;

+--------+------------+--------+

| ENAME | DNAME | DEPTNO |

+--------+------------+--------+

| SMITH | RESEARCH | 20 |

| ALLEN | SALES | 30 |

| ward | SALES | 30 |

| JONES | RESEARCH | 20 |

| MARTIN | SALES | 30 |

| BLAKE | SALES | 30 |

| CLARK | ACCOUNTING | 10 |

| SCOTT | RESEARCH | 20 |

| KING | ACCOUNTING | 10 |

| TURNER | SALES | 30 |

| ADAMS | RESEARCH | 20 |

| JAMES | SALES | 30 |

| FORD | RESEARCH | 20 |

| MILLER | ACCOUNTING | 10 |

+--------+------------+--------+

14 rows in set (0.00 sec)

**Query22. Write a query that displays the unique listing of all jobs that are in department 30.**

mysql> SELECT DISTINCT(JOB) FROM EMP WHERE DEPTNO=30;

+----------+

| JOB |

+----------+

| SALESMAN |

| MANAGER |

| CLERK |

+----------+

3 rows in set (0.00 sec)

**Query23. Write a query to display the employee name, department name and location for all employees who earn a commission.**

mysql> SELECT EMP.ENAME,DEPT.DNAME,DEPT.LOC FROM EMP JOIN DEPT ON EMP.DEPTNO = DEPT.DEPTNO;

+--------+------------+----------+

| ENAME | DNAME | LOC |

+--------+------------+----------+

| SMITH | RESEARCH | DALLAS |

| ALLEN | SALES | CHICAGO |

| ward | SALES | CHICAGO |

| JONES | RESEARCH | DALLAS |

| MARTIN | SALES | CHICAGO |

| BLAKE | SALES | CHICAGO |

| CLARK | ACCOUNTING | NEW YORK |

| SCOTT | RESEARCH | DALLAS |

| KING | ACCOUNTING | NEW YORK |

| TURNER | SALES | CHICAGO |

| ADAMS | RESEARCH | DALLAS |

| JAMES | SALES | CHICAGO |

| FORD | RESEARCH | DALLAS |

| MILLER | ACCOUNTING | NEW YORK |

+--------+------------+----------+

14 rows in set (0.00 sec)

**Query24. Write a query to display the employee name and department name for all employees who have 'A' in their name.**

mysql> SELECT EMP.ENAME ,DEPT.DNAME FROM EMP JOIN DEPT ON EMP.DEPTNO=DEPT.DEPTNO WHERE EMP.ENAME LIKE '%A%';

+--------+------------+

| ENAME | DNAME |

+--------+------------+

| ALLEN | SALES |

| ward | SALES |

| MARTIN | SALES |

| BLAKE | SALES |

| CLARK | ACCOUNTING |

| ADAMS | RESEARCH |

| JAMES | SALES |

+--------+------------+

7 rows in set (0.00 sec)

**Query25. Write a query to display the name, job, department number and department name for all employees who work at location DALLAS.**

mysql> SELECT EMP.ENAME ,EMP.JOB,EMP.DEPTNO,DEPT.DNAME FROM EMP JOIN DEPT ON EMP.DEPTNO=DEPT.DEPTNO AND DEPT.LOC = 'DALLAS';

+-------+---------+--------+----------+

| ENAME | JOB | DEPTNO | DNAME |

+-------+---------+--------+----------+

| SMITH | CLERK | 20 | RESEARCH |

| JONES | MANAGER | 20 | RESEARCH |

| SCOTT | ANALYST | 20 | RESEARCH |

| ADAMS | CLERK | 20 | RESEARCH |

| FORD | ANALYST | 20 | RESEARCH |

+-------+---------+--------+----------+

5 rows in set (0.00 sec)