

**MCAC104**  
**DATABASE SYSTEM**  
**ASSIGNMENT 1**  
**SUBMITTED BY**  
**GAURAV**  
**MCA(1<sup>st</sup> 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)