



MATA SUNDRI COLLEGE FOR WOMEN

UNIVERSITY OF DELHI

Inspiring Future since 1967

DATABASE MANAGEMENT SYSTEM

NAME : ANKITA BHANGALIA

ROLL NO. : CSC/21/17

SUBJECT : DBMS

EXAM-ROLL NO. : 21044570004

1. Queries to create table.

Ans .

#DEPARTMENT TABLE Queries

```
create table DEPARTMENT (
    -> Dno int PRIMARY KEY,
    -> Dname varchar(50) DEFAULT NULL ,
    -> Location varchar(50) DEFAULT 'New Delhi' );
```

```
mysql> create table DEPARTMENT (
    -> Dno int PRIMARY KEY,
    -> Dname varchar(50) DEFAULT NULL ,
    -> Location varchar(50) DEFAULT 'New Delhi' );
Query OK, 0 rows affected (0.35 sec)
```

```
mysql>
mysql> describe DEPARTMENT;
+-----+-----+-----+-----+-----+
| Field | Type   | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| Dno   | int    | NO   | PRI | NULL    |       |
| Dname | varchar(50) | YES  |     | NULL    |       |
| Location | varchar(50) | YES  |     | New Delhi |       |
+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

#EMPLOYEE TABLE Queries

```
create table EMPLOYEE (
    -> Eno char(3) PRIMARY KEY,
    -> Ename varchar(50) NOT NULL,
    -> Job_type varchar(50) NOT NULL,
    -> Manager char(3),
    -> Hire_date date NOT NULL,
    -> Dno int,
    -> Commission decimal(10,2),
    -> Salary decimal(7,2) NOT NULL,
    -> FOREIGN KEY(Dno) REFERENCES DEPARTMENT(Dno),
    -> FOREIGN KEY(Manager) REFERENCES EMPLOYEE(Eno) );
```

```
mysql> create table EMPLOYEE (
-> Eno char(3) PRIMARY KEY,
-> Ename varchar(50) NOT NULL,
-> Job_type varchar(50) NOT NULL,
-> Manager char(3),
-> Hire_date date NOT NULL,
-> Dno int,
-> Commission decimal(10,2),
-> Salary decimal(7,2) NOT NULL,
-> FOREIGN KEY(Dno) REFERENCES DEPARTMENT(Dno),
-> FOREIGN KEY(Manager) REFERENCES EMPLOYEE(Eno) );
Query OK, 0 rows affected (1.97 sec)
```

```
mysql> describe EMPLOYEE;
```

Field	Type	Null	Key	Default	Extra
Eno	char(3)	NO	PRI	NULL	
Ename	varchar(50)	NO		NULL	
Job_type	varchar(50)	NO		NULL	
Manager	char(3)	YES	MUL	NULL	
Hire_date	date	NO		NULL	
Dno	int	YES	MUL	NULL	
Commission	decimal(10,2)	YES		NULL	
Salary	decimal(7,2)	NO		NULL	

8 rows in set (0.00 sec)

#QUERY TO INSERT DATA INTO DEPARTMENT TABLE

```
INSERT INTO DEPARTMENT VALUES
-> (10,"Accounting" , "New York"),
-> (20,"Research" , "Dallas"),
-> (30,"Sales" , "Chicago"),
-> (40,"Operation" , "Boston"),
-> (50,"Marketing" , "New Delhi");
```

#QUERY TO INSERT DATA INTO EMPLOYEE TABLE

{ If we directly enter the data int this table it will give error due to foreign key constraint. So we have to first set the foreign key values to zero. }

```
set foreign_key_checks=0;
```

```
mysql> set foreign_key_checks=0;
Query OK, 0 rows affected (0.00 sec)
```

```
INSERT INTO EMPLOYEE VALUES
    -> (765, 'Martin', 'Sales_man', 198, '1981-04-
22', 30, 1400, 1250),
    -> (756, 'Jones', 'Manager', 783, '1981-04-
02', 20, 0, 2300),
    -> (752, 'Ward', 'Sales_man', 769, '1981-02-
22', 30, 500, 1300),
    -> (749, 'Allan', 'Sales_man', 769, '1981-02-
20', 30, 300, 2000),
    -> (736, 'Smith', 'Clerk', 790, '1980-12-
17', 20, 0, 1000),
    -> (793, 'Miller', 'Clerk', 788, '1982-01-
23', 40, 0, 1300),
    -> (792, 'Ford', 'Analyst', 756, '1981-12-
03', 20, 0, 2600),
    -> (790, 'James', 'Clerk', 769, '1981-12-
03', 30, 0, 950),
    -> (787, 'Adams', 'Clerk', 778, '1983-01-
12', 20, 0, 1150),
    -> (784, 'Turner', 'Sales_man', 769, '1981-09-
08', 30, 0, 1450),
    -> (783, 'King', 'President', NULL, '1981-11-
17', 10, 0, 2950),
    -> (788, 'Scott', 'Analyst', 756, '1982-12-
09', 20, 0, 2850),
    -> (778, 'Clark', 'Manager', 783, '1981-06-
09', 10, 0, 2900),
    -> (769, 'Blake', 'Manager', 783, '1981-05-
01', 30, 0, 2870);
```

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```
mysql> INSERT INTO EMPLOYEE VALUES
-> (765, 'Martin', 'Sales_man', 198, '1981-04-22', 30, 1400, 1250),
-> (756, 'Jones', 'Manager', 783, '1981-04-02', 20, 0, 2300),
-> (752, 'Ward', 'Sales_man', 769, '1981-02-22', 30, 500, 1300),
-> (749, 'Allan', 'Sales_man', 769, '1981-02-20', 30, 300, 2000),
-> (736, 'Smith', 'Clerk', 790, '1980-12-17', 20, 0, 1000),
-> (793, 'Miller', 'Clerk', 788, '1982-01-23', 40, 0, 1300),
-> (792, 'Ford', 'Analyst', 756, '1981-12-03', 20, 0, 2600),
-> (790, 'James', 'Clerk', 769, '1981-12-03', 30, 0, 950),
-> (787, 'Adams', 'Clerk', 778, '1983-01-12', 20, 0, 1150),
-> (784, 'Turner', 'Sales_man', 769, '1981-09-08', 30, 0, 1450),
-> (783, 'King', 'President', NULL, '1981-11-17', 10, 0, 2950),
-> (788, 'Scott', 'Analyst', 756, '1982-12-09', 20, 0, 2850),
-> (778, 'Clark', 'Manager', 783, '1981-06-09', 10, 0, 2900),
-> (769, 'Blake', 'Manager', 783, '1981-05-01', 30, 0, 2870);
```

```
mysql> SELECT * FROM EMPLOYEE;
```

Eno	Ename	Job_type	Manager	Hire_date	Dno	Commission	Salary
736	Smith	Clerk	790	1980-12-17	20	0.00	1000.00
749	Allan	Sales_man	769	1981-02-20	30	300.00	2000.00
752	Ward	Sales_man	769	1981-02-22	30	500.00	1300.00
756	Jones	Manager	783	1981-04-02	20	0.00	2300.00
765	Martin	Sales_man	198	1981-04-22	30	1400.00	1250.00
769	Blake	Manager	783	1981-05-01	30	0.00	2870.00
778	Clark	Manager	783	1981-06-09	10	0.00	2900.00
783	King	President	NULL	1981-11-17	10	0.00	2950.00
784	Turner	Sales_man	769	1981-09-08	30	0.00	1450.00
787	Adams	Clerk	778	1983-01-12	20	0.00	1150.00
788	Scott	Analyst	756	1982-12-09	20	0.00	2850.00
790	James	Clerk	769	1981-12-03	30	0.00	950.00
792	Ford	Analyst	756	1981-12-03	20	0.00	2600.00
793	Miller	Clerk	788	1982-01-23	40	0.00	1300.00

14 rows in set (0.00 sec)

1. Query to display Employee Name, Job, Hire Date, Employee Number; for each employee with the Employee Number appearing first.

Ans .

```
mysql> SELECT Eno , Ename , Job_type, Hire_date  
-> FROM EMPLOYEE;
```

OUTPUT:-

```
mysql>  
mysql> SELECT Eno , Ename , Job_type, Hire_date  
-> FROM EMPLOYEE;  
+----+-----+-----+-----+  
| Eno | Ename | Job_type | Hire_date |  
+----+-----+-----+-----+  
| 736 | Smith | Clerk | 1980-12-17 |  
| 749 | Allan | Sales_man | 1981-02-20 |  
| 752 | Ward | Sales_man | 1981-02-22 |  
| 756 | Jones | Manager | 1981-04-02 |  
| 765 | Martin | Sales_man | 1981-04-22 |  
| 769 | Blake | Manager | 1981-05-01 |  
| 778 | Clark | Manager | 1981-06-09 |  
| 783 | King | President | 1981-11-17 |  
| 784 | Turner | Sales_man | 1981-09-08 |  
| 787 | Adams | Clerk | 1983-01-12 |  
| 788 | Scott | Analyst | 1982-12-09 |  
| 790 | James | Clerk | 1981-12-03 |  
| 792 | Ford | Analyst | 1981-12-03 |  
| 793 | Miller | Clerk | 1982-01-23 |  
+----+-----+-----+-----+  
14 rows in set (0.00 sec)
```

2. Query to display unique Jobs from the Employee Table.

Ans .

```
mysql> SELECT DISTINCT Job_type  
-> FROM EMPLOYEE;
```

OUTPUT:-

```
mysql>
mysql> SELECT DISTINCT Job_type
-> FROM EMPLOYEE;
+-----+
| Job_type |
+-----+
| Clerk    |
| Sales_man|
| Manager   |
| President |
| Analyst   |
+-----+
5 rows in set (0.00 sec)
```

3. Query to display the Employee Name concatenated by a Job separated by a comma.

Ans.

```
mysql> SELECT CONCAT (Ename, ', ' , Job_type)
-> FROM EMPLOYEE;
```

OUTPUT:-

```
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mysql>
mysql> SELECT CONCAT (Ename, ',' , Job_type)
-> FROM EMPLOYEE;
+-----+
| CONCAT (Ename, ',' , Job_type) |
+-----+
| Smith,Clerk
| Allan,Sales_man
| Ward,Sales_man
| Jones,Manager
| Martin,Sales_man
| Blake,Manager
| Clark,Manager
| King,President
| Turner,Sales_man
| Adams,Clerk
| Scott,Analyst
| James,Clerk
| Ford,Analyst
| Miller,Clerk
+-----+
14 rows in set (0.00 sec)
```

4. Query to display all the data from the Employee Table. Separate each Column by a comma and name the said column as THE_OUTPUT.

Ans.

```
mysql> SELECT
CONCAT(Eno, ',', Ename, ',', Job_type, ',', Manager, ',', Hire_da
te, ',', Dno, ',', Commission, ',', Salary)
-> AS THE_OUTPUT
-> FROM EMPLOYEE;
```

OUTPUT:-

```
mysql>
mysql> SELECT CONCAT(Eno, ',', Ename, ',', Job_type, ',', Manager, ',', Hire_date, ',', Dno, ',', Commission, ',', Salary)
-> AS THE_OUTPUT
-> FROM EMPLOYEE;
ERROR 1583 (42000): Incorrect parameters in the call to native function 'concat'
mysql> SELECT CONCAT(Eno,',',Ename,',',Job_type,',',Manager,',',Hire_date,',',Dno,',',Commission,',',Salary)
-> AS THE_OUTPUT
-> FROM EMPLOYEE;
+-----+
| THE_OUTPUT
+-----+
| 736,Smith,Clerk,790,1980-12-17,20,0.00,1000.00
| 749,Allan,Sales_man,769,1981-02-20,30,300.00,2000.00
| 752,Ward,Sales_man,769,1981-02-22,30,500.00,1300.00
| 756,Jones,Manager,783,1981-04-02,20,0.00,2300.00
| 765,Martin,Sales_man,198,1981-04-22,30,1400.00,1250.00
| 769,Blake,Manager,783,1981-05-01,30,0.00,2870.00
| 778,Clark,Manager,783,1981-06-09,10,0.00,2900.00
| NULL
| 784,Turner,Sales_man,769,1981-09-08,30,0.00,1450.00
| 787,Adams,Clerk,778,1983-01-12,20,0.00,1150.00
| 788,Scott,Analyst,756,1982-12-09,20,0.00,2850.00
| 790,James,Clerk,769,1981-12-03,30,0.00,950.00
| 792,Ford,Analyst,756,1981-12-03,20,0.00,2600.00
| 793,Miller,Clerk,788,1982-01-23,40,0.00,1300.00
+-----+
14 rows in set (0.00 sec)
```

5. Query to display the Employee Name and Salary of all the employees earning more than \$2850.

Ans .

```
mysql> SELECT EName , Salary
-> FROM EMPLOYEE
-> WHERE Salary>2850;
```

OUTPUT:-

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```
mysql>
mysql> SELECT EName , Salary
-> FROM EMPLOYEE
-> WHERE Salary>2850;
```

EName	Salary
Blake	2870.00
Clark	2900.00
King	2950.00

3 rows in set (0.00 sec)

6. Query to display Employee Name and Department Number for the Employee No= 790 .

Ans.

```
mysql> SELECT Ename,Dno
-> FROM EMPLOYEE
-> WHERE Eno=790;
```

OUTPUT:-

```
mysql> SELECT Ename,Dno
-> FROM EMPLOYEE
-> WHERE Eno=790;
```

Ename	Dno
James	30

1 row in set (0.00 sec)

7. Query to display Employee Name and Salary for all employees whose salary is not in the range of \$1500 and \$2850.

Ans.

```
mysql> SELECT Ename ,Salary  
-> FROM EMPLOYEE  
-> WHERE Salary NOT BETWEEN 1500 AND 2850;
```

OUTPUT:-

ankita@an

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```
mysql>  
mysql> SELECT Ename ,Salary  
-> FROM EMPLOYEE  
-> WHERE Salary NOT BETWEEN 1500 AND 2850;  
+-----+-----+  
| Ename | Salary |  
+-----+-----+  
| Smith | 1000.00 |  
| Ward | 1300.00 |  
| Martin | 1250.00 |  
| Blake | 2870.00 |  
| Clark | 2900.00 |  
| King | 2950.00 |  
| Turner | 1450.00 |  
| Adams | 1150.00 |  
| James | 950.00 |  
| Miller | 1300.00 |  
+-----+-----+  
10 rows in set (0.00 sec)
```

8. Query to display Employee Name and Department No. of all the employees in Dept 10 and Dept 30 in the alphabetical order by name.

Ans.

```
mysql> SELECT Ename,Dno  
-> FROM EMPLOYEE  
-> WHERE Dno=10 OR Dno=30;
```

OUTPUT:-

ankita@ankita-b

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```
mysql>
mysql> SELECT Ename,Dno
-> FROM EMPLOYEE
-> WHERE Dno=10 OR Dno=30;
```

Ename	Dno
Clark	10
King	10
Allan	30
Ward	30
Martin	30
Blake	30
Turner	30
James	30

8 rows in set (0.00 sec)

9. Query to display Name and Hire Date of every Employee who was hired in 1981.

Ans.

```
mysql> SELECT Ename ,Hire_date
-> FROM EMPLOYEE
-> WHERE Hire_date LIKE '1981%' ;
```

OUTPUT:-

```
mysql>
mysql> SELECT Ename ,Hire_date
-> FROM EMPLOYEE
-> WHERE Hire_date LIKE '1981%';
```

Ename	Hire_date
Allan	1981-02-20
Ward	1981-02-22
Jones	1981-04-02
Martin	1981-04-22
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)

10. Query to display Name and Job of all employees who have not assigned a supervisor.

Ans.

```
mysql> SELECT Ename , Job_type
-> FROM EMPLOYEE
-> WHERE Manager IS NULL;
```

OUTPUT:-

```
mysql>
mysql> SELECT Ename , Job_type
-> FROM EMPLOYEE
-> WHERE Manager IS NULL;
+-----+-----+
| Ename | Job_type |
+-----+-----+
| King  | President |
+-----+-----+
1 row in set (0.00 sec)
```

11. Query to display the Name, Salary and Commission for all the employees who earn commission.

Ans .

```
mysql> SELECT Ename ,Salary ,Commission  
-> FROM EMPLOYEE  
-> WHERE Commission>0 ;
```

OUTPUT:-

```
mysql>  
mysql> SELECT Ename ,Salary ,Commission  
-> FROM EMPLOYEE  
-> WHERE Commission>0 ;  
+-----+-----+-----+  
| Ename | Salary | Commission |  
+-----+-----+-----+  
| Allan | 2000.00 | 300.00 |  
| Ward | 1300.00 | 500.00 |  
| Martin | 1250.00 | 1400.00 |  
+-----+-----+-----+  
3 rows in set (0.00 sec)
```

12. Sort the data in descending order of Salary and Commission.

Ans .

```
mysql> SELECT *  
-> FROM EMPLOYEE  
-> ORDER BY Salary DESC , Commission DESC;
```

OUTPUT:-

ankita@ankita-bhangalia:~

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```
mysql>
mysql> SELECT *
-> FROM EMPLOYEE
-> ORDER BY Salary DESC , Commission DESC;
+-----+-----+-----+-----+-----+-----+-----+-----+
| Eno | Ename | Job_type | Manager | Hire_date | Dno | Commission | Salary |
+-----+-----+-----+-----+-----+-----+-----+-----+
| 783 | King   | President | NULL    | 1981-11-17 | 10  | 0.00      | 2950.00 |
| 778 | Clark  | Manager   | 783     | 1981-06-09 | 10  | 0.00      | 2900.00 |
| 769 | Blake  | Manager   | 783     | 1981-05-01 | 30  | 0.00      | 2870.00 |
| 788 | Scott   | Analyst   | 756     | 1982-12-09 | 20  | 0.00      | 2850.00 |
| 792 | Ford   | Analyst   | 756     | 1981-12-03 | 20  | 0.00      | 2600.00 |
| 756 | Jones  | Manager   | 783     | 1981-04-02 | 20  | 0.00      | 2300.00 |
| 749 | Allan  | Sales_man | 769     | 1981-02-20 | 30  | 300.00    | 2000.00 |
| 784 | Turner | Sales_man | 769     | 1981-09-08 | 30  | 0.00      | 1450.00 |
| 752 | Ward   | Sales_man | 769     | 1981-02-22 | 30  | 500.00    | 1300.00 |
| 793 | Miller | Clerk     | 788     | 1982-01-23 | 40  | 0.00      | 1300.00 |
| 765 | Martin | Sales_man | 198     | 1981-04-22 | 30  | 1400.00   | 1250.00 |
| 787 | Adams  | Clerk     | 778     | 1983-01-12 | 20  | 0.00      | 1150.00 |
| 736 | Smith  | Clerk     | 790     | 1980-12-17 | 20  | 0.00      | 1000.00 |
| 790 | James  | Clerk     | 769     | 1981-12-03 | 30  | 0.00      | 950.00 |
+-----+-----+-----+-----+-----+-----+-----+-----+
14 rows in set (0.00 sec)
```

13. Query to display Name of all the employees where the third letter of their name is 'A' .

Ans .

```
mysql> SELECT Ename
-> FROM EMPLOYEE
-> WHERE Ename LIKE '__a%' ;
```

OUTPUT:-

```
mysql>
mysql> SELECT Ename
-> FROM EMPLOYEE
-> WHERE Ename LIKE '__a%' ;
+-----+
| Ename |
+-----+
| Blake |
| Clark |
| Adams |
+-----+
3 rows in set (0.00 sec)
```

14. Query to display Name of all employees either have two 'R's or have two 'A's in their name and are either in Dept No = 30 or their Manager's Employee No = 7788.

Ans .

```
mysql> SELECT Ename
-> FROM EMPLOYEE
-> WHERE (Ename LIKE '%a%a%' OR Ename LIKE '%r%r%' )
AND (Dno=30 OR Manager='778') ;
```

OUTPUT:-

```
mysql>
mysql> SELECT Ename
-> FROM EMPLOYEE
-> WHERE (Ename LIKE '%a%a%' OR Ename LIKE '%r%r%' ) AND (Dno=30 OR Manager='778') ;
+-----+
| Ename |
+-----+
| Allan |
| Turner |
| Adams |
+-----+
3 rows in set (0.00 sec)
```

15. Query to display Name, Salary and Commission for all employees whose Commission amount is greater than their Salary increased by 5%.

Ans .

```
mysql> SELECT Ename ,Salary, Commission
-> FROM EMPLOYEE
-> WHERE (Salary + Salary * (0.05) ) < Commission ;
```

OUTPUT:-

ankita@ankita-bhangalia: ~

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```
^C
mysql> SELECT Ename ,Salary, Commission
-> FROM EMPLOYEE
-> WHERE (Salary + Salary * (0.05) ) < Commission ;
+-----+-----+-----+
| Ename | Salary | Commission |
+-----+-----+-----+
| Martin | 1250.00 |      1400.00 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

16. Query to display the Current Date along with the day name.

Ans.

```
mysql> SELECT DAYNAME(CURDATE()), CURDATE();
```

OUTPUT:-

```
mysql>
mysql> SELECT DAYNAME(CURDATE()), CURDATE();
+-----+-----+
| DAYNAME(CURDATE()) | CURDATE()   |
+-----+-----+
| Wednesday          | 2023-04-12 |
+-----+-----+
1 row in set (0.00 sec)
```

17. Query to display Name, Hire Date and Salary Review Date which is the 1st Monday after six months of employment.

Ans.

```
mysql> SELECT Ename, Hire_date, DATE_ADD(Hire_date,
INTERVAL 6 MONTH) + INTERVAL (8 -
DAYOFWEEK(DATE_ADD(Hire_date, INTERVAL 6 MONTH))) DAY AS
Review_date
->      FROM EMPLOYEE
->      WHERE DAYOFWEEK(DATE_ADD(Hire_date, INTERVAL 6
MONTH)) = 2;
```

Review Date using the DATE_ADD function to add 6 months to the Hire Date, and then add an additional number of days to get to the 1st Monday after 6 months.

OUTPUT:-

ankita@ankita-bhangalia:~

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```
mysql>
mysql> SELECT Ename, Hire_date, DATE_ADD(Hire_date, INTERVAL 6 MONTH) + INTERVAL (8 - DAYOFWEEK(DATE_ADD(Hire_date, INTERVAL 6 MONTH))) DAY AS Review_date
->      FROM EMPLOYEE
->      WHERE DAYOFWEEK(DATE_ADD(Hire_date, INTERVAL 6 MONTH)) = 2;
+-----+-----+
| Ename | Hire_date | Review_date |
+-----+-----+
| King  | 1981-11-17 | 1982-05-23 |
| Turner | 1981-09-08 | 1982-03-14 |
+-----+-----+
2 rows in set (0.00 sec)
```

18. Query to display Name and calculate the number of months between today and the date on which employee was hired of department 'Purchase' .

Ans.

To solve this query, I added a Purchase instance in Department and also added an employee from that department in EMPLOYEE TABLE;

```
mysql> INSERT INTO DEPARTMENT (Dno , Dname , Location )
VALUES ('60' , 'Purchase' , 'Kangra' );
```

```
mysql> INSERT INTO EMPLOYEE (Eno , Ename , Job_type ,
Manager , Hire_date , Dno , Commission , Salary ) VALUES
( '794' , 'Kim' , 'Manager' , '769' , '1981-06-23' , 60 ,
0.00 , 4000.00 );
```

```
mysql>
mysql> SELECT * FROM DEPARTMENT;
+-----+-----+
| Dno | Dname      | Location   |
+-----+-----+
| 10  | Accounting  | New York  |
| 20  | Research    | Dallas     |
| 30  | Sales       | Chicago    |
| 40  | Operation   | Boston     |
| 50  | Marketing   | New Delhi |
+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> INSERT INTO DEPARTMENT (Dno , Dname , Location ) VALUES ('60' , 'Purchase' , 'Kangra' );
Query OK, 1 row affected (0.04 sec)
```

```
mysql>
mysql> SELECT * FROM DEPARTMENT;
+-----+-----+
| Dno | Dname      | Location   |
+-----+-----+
| 10  | Accounting  | New York  |
| 20  | Research    | Dallas     |
| 30  | Sales       | Chicago    |
| 40  | Operation   | Boston     |
| 50  | Marketing   | New Delhi |
| 60  | Purchase   | Kangra    |
+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> INSERT INTO EMPLOYEE (Eno , Ename , Job_type , Manager , Hire_date , Dno , Commission , Salary ) VALUES ( '794' , 'Kim' , 'Manager' , '769' , '1981-06-23' , 60 , 0.00 , 4000.00 );
Query OK, 1 row affected (0.05 sec)
```

```
mysql>
mysql> SELECT * FROM EMPLOYEE;
+-----+-----+-----+-----+-----+-----+
| Eno | Ename | Job_type | Manager | Hire_date | Dno | Commission | Salary |
+-----+-----+-----+-----+-----+-----+
| 736 | Smith | Clerk | 790 | 1980-12-17 | 20 | 0.00 | 1000.00 |
| 749 | Allan | Sales_man | 769 | 1981-02-20 | 30 | 300.00 | 2000.00 |
| 752 | Ward | Sales_man | 769 | 1981-02-22 | 30 | 500.00 | 1300.00 |
| 756 | Jones | Manager | 783 | 1981-04-02 | 20 | 0.00 | 2300.00 |
| 765 | Martin | Sales_man | 198 | 1981-04-22 | 30 | 1400.00 | 1250.00 |
| 769 | Blake | Manager | 783 | 1981-05-01 | 30 | 0.00 | 2870.00 |
| 778 | Clark | Manager | 783 | 1981-06-09 | 10 | 0.00 | 2900.00 |
| 783 | King | President | NULL | 1981-11-17 | 10 | 0.00 | 2950.00 |
| 784 | Turner | Sales_man | 769 | 1981-09-08 | 30 | 0.00 | 1450.00 |
| 787 | Adams | Clerk | 778 | 1983-01-12 | 20 | 0.00 | 1150.00 |
| 788 | Scott | Analyst | 756 | 1982-12-09 | 20 | 0.00 | 2850.00 |
| 790 | James | Clerk | 769 | 1981-12-03 | 30 | 0.00 | 950.00 |
| 792 | Ford | Analyst | 756 | 1981-12-03 | 20 | 0.00 | 2600.00 |
| 793 | Miller | Clerk | 788 | 1982-01-23 | 40 | 0.00 | 1300.00 |
| 794 | Kim | Manager | 769 | 1981-06-23 | 60 | 0.00 | 4000.00 |
+-----+-----+-----+-----+-----+
15 rows in set (0.00 sec)
```

```
mysql> SELECT Ename ,
    TIMESTAMPDIFF(MONTH,Hire_date,NOW()) AS Months_since_hire
    -> FROM EMPLOYEE , DEPARTMENT AS D
    -> WHERE EMPLOYEE.Dno=D.Dno AND D.Dname='Purchase' ;
```

OUTPUT:-

```
mysql>
mysql> SELECT Ename , TIMESTAMPDIFF(MONTH,Hire_date,NOW()) AS Months_since_hire
-> FROM EMPLOYEE , DEPARTMENT AS D
-> WHERE EMPLOYEE.Dno=D.Dno AND D.Dname='Purchase' ;
+-----+-----+
| Ename | Months_since_hire |
+-----+-----+
| Kim | 501 |
+-----+-----+
1 row in set (0.00 sec)
```

```
mysql> █
```

19. Query to display the following for each employee <E-Name> earns <Salary> monthly but wants <3*Current Salary>. Label the Column as Dream Salary.

Ans .

```
mysql> SELECT CONCAT(Ename , ' earns ' , Salary , '  
monthly but wants ' , 3*Salary) AS Dream_Salary  
-> FROM EMPLOYEE;
```

OUTPUT:-

```
mysql>  
mysql> SELECT CONCAT(Ename , ' earns ' , Salary , ' but wants ' , 3*Salary) AS Dream_Salary FROM EMPLOYEE;  
+-----+  
| Dream_Salary |  
+-----+  
| Smith earns 1000.00 but wants 3000.00 |  
| Allan earns 2000.00 but wants 6000.00 |  
| Ward earns 1300.00 but wants 3900.00 |  
| Jones earns 2300.00 but wants 6900.00 |  
| Martin earns 1250.00 but wants 3750.00 |  
| Blake earns 2870.00 but wants 8610.00 |  
| Clark earns 2900.00 but wants 8700.00 |  
| King earns 2950.00 but wants 8850.00 |  
| Turner earns 1450.00 but wants 4350.00 |  
| Adams earns 1150.00 but wants 3450.00 |  
| Scott earns 2850.00 but wants 8550.00 |  
| James earns 950.00 but wants 2850.00 |  
| Ford earns 2600.00 but wants 7800.00 |  
| Miller earns 1300.00 but wants 3900.00 |  
+-----+  
14 rows in set (0.00 sec)
```

20. Query to display Name with the 1st letter capitalized and all other letter lower case and length of their name of all the employees whose name starts with 'J', 'A' and 'M'.

Ans .

```
mysql> SELECT CONCAT(UPPER(SUBSTRING(Ename,1,1)) ,  
LOWER(SUBSTRING(Ename,2,CHAR_LENGTH(Ename)))) AS Name ,  
CHAR_LENGTH(Ename) AS Name_len  
-> FROM EMPLOYEE  
-> WHERE Ename LIKE "J%" OR Ename LIKE "A%" OR Ename  
LIKE "M%" ;
```

OUTPUT : -

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```
mysql>  
mysql> SELECT CONCAT(UPPER(SUBSTRING(Ename,1,1)) , LOWER(SUBSTRING(Ename,2,CHAR_LENGTH(Ename)))) AS Name , CHAR_LENGTH(Ename) AS Name_len  
-> FROM EMPLOYEE  
-> WHERE Ename LIKE "J%" OR Ename LIKE "A%" OR Ename LIKE "M%" ;
```

Name	Name_len
Allan	5
Jones	5
Martin	6
Adams	5
James	5
Miller	6

6 rows in set (0.00 sec)

21. Query to display Name, Hire Date and Day of the week on which the employee started.

Ans.

```
mysql> SELECT Ename , Hire_date , DAYNAME(Hire_date) AS  
Hire_day  
-> FROM EMPLOYEE;
```

OUTPUT:-

```
mysql>  
mysql> SELECT Ename , Hire_date , DAYNAME(Hire_date) AS Hire_day  
-> FROM EMPLOYEE;  
+-----+-----+-----+  
| Ename | Hire_date | Hire_day |  
+-----+-----+-----+  
| Smith | 1980-12-17 | Wednesday |  
| Allan | 1981-02-20 | Friday |  
| Ward | 1981-02-22 | Sunday |  
| Jones | 1981-04-02 | Thursday |  
| Martin | 1981-04-22 | Wednesday |  
| Blake | 1981-05-01 | Friday |  
| Clark | 1981-06-09 | Tuesday |  
| King | 1981-11-17 | Tuesday |  
| Turner | 1981-09-08 | Tuesday |  
| Adams | 1983-01-12 | Wednesday |  
| Scott | 1982-12-09 | Thursday |  
| James | 1981-12-03 | Thursday |  
| Ford | 1981-12-03 | Thursday |  
| Miller | 1982-01-23 | Saturday |  
+-----+-----+-----+  
14 rows in set (0.00 sec)
```

22. Query to display Name, Department Name and Department No for all the employees.

Ans.

```
mysql> SELECT E.Ename , E.Dno , D.Dname  
-> FROM EMPLOYEE AS E , DEPARTMENT AS D  
-> WHERE E.Dno=D.Dno;
```

OUTPUT:-

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```
mysql>
mysql> SELECT E.Ename , E.Dno , D.Dname
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE E.Dno=D.Dno;
+-----+-----+-----+
| Ename | Dno  | Dname   |
+-----+-----+-----+
| Clark | 10   | Accounting |
| King  | 10   | Accounting |
| Smith | 20   | Research   |
| Jones | 20   | Research   |
| Adams | 20   | Research   |
| Scott | 20   | Research   |
| Ford  | 20   | Research   |
| Allan | 30   | Sales     |
| Ward  | 30   | Sales     |
| Martin| 30   | Sales     |
| Blake | 30   | Sales     |
| Turner| 30   | Sales     |
| James  | 30   | Sales     |
| Miller| 40   | Operation  |
+-----+-----+-----+
14 rows in set (0.00 sec)
```

**23. Query to display Unique Listing of all Jobs
that are in Department number 30.**

Ans.

```
mysql> SELECT DISTINCT Job_type
-> FROM EMPLOYEE
-> WHERE Dno=30;
```

OUTPUT:-

```
mysql>
mysql> SELECT DISTINCT Job_type
-> FROM EMPLOYEE
-> WHERE Dno=30;
+-----+
| Job_type |
+-----+
| Sales_man |
| Manager   |
| Clerk    |
+-----+
3 rows in set (0.00 sec)
```

24. Query to display Name, Dept Name of all employees who have an 'A' in their name.

Ans .

```
mysql> SELECT E.Ename , D.Dname
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE E.Ename LIKE '%A%' AND D.Dno = E.Dno;
```

OUTPUT:-

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```
mysql> SELECT E.Ename , D.Dname
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE E.Ename LIKE '%A%' AND D.Dno = E.Dno;
+-----+
| Ename | Dname   |
+-----+
| Allan | Sales   |
| Ward  | Sales   |
| Martin | Sales   |
| Blake | Sales   |
| Clark | Accounting |
| Adams | Research |
| James | Sales   |
+-----+
7 rows in set (0.00 sec)
```

25. Query to display Name, Job, Department No. And Department Name for all the employees working at the Dallas location.

Ans .

```
mysql> SELECT E.Ename , E.Job_type , E.Dno , D.Dname
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE E.Dno=D.Dno AND Location ='Dallas' ;
```

OUTPUT:-

```
mysql>
mysql> SELECT E.Ename , E.Job_type , E.Dno , D.Dname
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE E.Dno=D.Dno AND Location ='Dallas' ;
+-----+-----+-----+
| Ename | Job_type | Dno   | Dname    |
+-----+-----+-----+
| Smith | Clerk    | 20    | Research |
| Jones | Manager   | 20    | Research |
| Adams | Clerk    | 20    | Research |
| Scott | Analyst   | 20    | Research |
| Ford  | Analyst   | 20    | Research |
+-----+-----+-----+
5 rows in set (0.00 sec)
```

26. Query to display Name and Employee no. Along with their supervisor's Name and the supervisor's employee no; along with the Employees' Name who do not have a supervisor.

Ans.

```
mysql> SELECT E.Eno, E.Ename, M.Eno AS Manager_No ,
M.Ename AS Manager_Name
-> FROM EMPLOYEE AS E LEFT OUTER JOIN EMPLOYEE AS M
ON E.Manager = M.Eno;
```

OUTPUT:-

```
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+-----+-----+-----+-----+
14 rows in set (0.02 sec)

mysql>
mysql> SELECT E.Employer_No , E.Employer_Name , M.Employer_No AS Manager_No , M.Employer_Name AS Manager_Name
-> FROM EMPLOYEE AS E LEFT OUTER JOIN EMPLOYEE AS M ON E.Manager = M.Employer;
+-----+-----+-----+-----+
| Employer_No | Employer_Name | Manager_No | Manager_Name |
+-----+-----+-----+-----+
| 736 | Smith | 790 | James |
| 749 | Allan | 769 | Blake |
| 752 | Ward | 769 | Blake |
| 756 | Jones | 783 | King |
| 765 | Martin | NULL | NULL |
| 769 | Blake | 783 | King |
| 778 | Clark | 783 | King |
| 783 | King | NULL | NULL |
| 784 | Turner | 769 | Blake |
| 787 | Adams | 778 | Clark |
| 788 | Scott | 756 | Jones |
| 790 | James | 769 | Blake |
| 792 | Ford | 756 | Jones |
| 793 | Miller | 788 | Scott |
+-----+-----+-----+-----+
14 rows in set (0.00 sec)
```

27. Query to display Name, Dept No. And Salary of any employee whose department No. and salary matches both the department no. And the salary of any employee who earns a commission.

Ans.

```
mysql> SELECT Employer_Name , Dno , Salary
-> FROM EMPLOYEE
-> WHERE (Dno,Salary) IN (SELECT Dno,Salary FROM
EMPLOYEE WHERE Commission>0);
```

OUTPUT:-

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```
mysql>
mysql> SELECT Ename ,Dno ,Salary
-> FROM EMPLOYEE
-> WHERE (Dno,Salary) IN (SELECT Dno,Salary FROM EMPLOYEE WHERE Commission>0);
+-----+-----+
| Ename | Dno | Salary |
+-----+-----+
| Allan |    30 | 2000.00 |
| Ward  |    30 | 1300.00 |
| Martin |    30 | 1250.00 |
+-----+-----+
3 rows in set (0.03 sec)
```

28. Query to display Name and Salaries represented by asterisks, where each asterisk (*) signifies \$100.

Ans.

```
mysql> SELECT Ename , CONCAT(REPEAT ('*' , (Salary/100)))
-> FROM EMPLOYEE;
```

OUTPUT:-

```
mysql>
mysql> SELECT Ename, CONCAT(REPEAT('*',(Salary/100)))
-> FROM EMPLOYEE;
+-----+-----+
| Ename | CONCAT(REPEAT('*',(Salary/100))) |
+-----+-----+
| Smith | *****
| Allan | *****
| Ward  | *****
| Jones | *****
| Martin | *****
| Blake | *****
| Clark | *****
| King  | *****
| Turner | *****
| Adams | *****
| Scott  | *****
| James  | *****
| Ford   | *****
| Miller | *****
+-----+-----+
14 rows in set (0.00 sec)
```

29. Query to display the Highest, Lowest, Sum and Average Salaries of all the employees

Ans.

```
mysql> SELECT MAX(Salary) AS Highest , MIN(Salary) AS Lowest , SUM(Salary) AS SALARY,
    AVG(Salary) AS Average
    -> FROM EMPLOYEE;
```

OUTPUT:-

```
mysql>
mysql> SELECT MAX(Salary) AS Highest , MIN(Salary) AS Lowest , SUM(Salary) AS SALARY,
    AVG(Salary) AS Average
    -> FROM EMPLOYEE;
+-----+-----+-----+
| Highest | Lowest | SALARY   | Average   |
+-----+-----+-----+
| 2950.00 | 950.00 | 26870.00 | 1919.285714 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

30. Query to display the number of employees performing the same Job type functions .

Ans.

```
mysql> SELECT Job_type, COUNT(*)
    -> FROM EMPLOYEE GROUP BY Job_type;
```

OUTPUT:-

```
mysql>
mysql> SELECT Job_type, COUNT(*)
    -> FROM EMPLOYEE GROUP BY Job_type;
+-----+-----+
| Job_type | COUNT(*) |
+-----+-----+
| Clerk    |      4 |
| Sales_man |     4 |
| Manager  |      3 |
| President |      1 |
| Analyst   |      2 |
+-----+-----+
5 rows in set (0.00 sec)
```

31. Query to display the total number of supervisors without listing their names.

Ans.

```
mysql> SELECT COUNT(DISTINCT Manager) AS Manager_No  
-> FROM EMPLOYEE;
```

OUTPUT:-

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```
mysql>  
mysql>  
mysql> SELECT COUNT(DISTINCT Manager) AS Manager_No  
-> FROM EMPLOYEE;  
+-----+  
| Manager_No |  
+-----+  
|        7 |  
+-----+  
1 row in set (0.00 sec)
```

32. Query to display the Department Name, Location Name, No. of Employees and the average salary for all employees in that department.

Ans.

```
mysql> SELECT D.Dname ,D.Location , AVG(E.Salary) ,  
COUNT(*)  
-> FROM EMPLOYEE AS E , DEPARTMENT AS D  
-> WHERE D.Dno=E.Dno GROUP BY D.Dno , D.Dname ;
```

OUTPUT:-

ankita@ankita-bha

```
File Edit View Search Terminal Help
mysql>
mysql> SELECT D.Dname ,D.Location , AVG(E.Salary) , COUNT(*)
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE D.Dno=E.Dno GROUP BY D.Dno , D.Dname ;
+-----+-----+-----+-----+
| Dname      | Location | AVG(E.Salary) | COUNT(*) |
+-----+-----+-----+-----+
| Research    | Dallas   | 1980.000000 |      5 |
| Sales       | Chicago  | 1636.666667 |      6 |
| Accounting  | New York | 2925.000000 |      2 |
| Operation   | Boston   | 1300.000000 |      1 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

33. Query to display Name and Hire Date for all employees in the same dept. as Blake.

Ans.

```
mysql> SELECT Ename , Hire_date
-> FROM EMPLOYEE
-> WHERE Dno=(SELECT Dno FROM EMPLOYEE WHERE
Ename='Blake') ;
```

OUTPUT:-

```
mysql>
mysql> SELECT Ename , Hire_date
-> FROM EMPLOYEE
-> WHERE Dno=(SELECT Dno FROM EMPLOYEE WHERE Ename='Blake') ;
+-----+-----+
| Ename | Hire_date |
+-----+-----+
| Allan | 1981-02-20 |
| Ward  | 1981-02-22 |
| Martin | 1981-04-22 |
| Blake | 1981-05-01 |
| Turner | 1981-09-08 |
| James  | 1981-12-03 |
+-----+-----+
6 rows in set (0.00 sec)
```

34. Query to display the Employee No. And Name for all employees who earn more than the average salary.

Ans .

```
mysql> SELECT Eno , Ename
-> FROM EMPLOYEE
-> WHERE Salary > (SELECT AVG(Salary) AS Avg FROM
EMPLOYEE);
```

OUTPUT:-

ankita@ankita-

```
File Edit View Search Terminal Help
mysql>
mysql> SELECT Eno , Ename
-> FROM EMPLOYEE
-> WHERE Salary > (SELECT AVG(Salary) AS Avg FROM EMPLOYEE);
+----+----+
| Eno | Ename |
+----+----+
| 749 | Allan |
| 756 | Jones |
| 769 | Blake |
| 778 | Clark |
| 783 | King |
| 788 | Scott |
| 792 | Ford |
+----+----+
7 rows in set (0.00 sec)
```

35. Query to display Employee Number and Name for all employees who work in a department with any employee whose name contains a 'T' .

Ans .

```
mysql> SELECT Eno , Ename
-> FROM EMPLOYEE
-> WHERE Dno IN (SELECT Dno FROM EMPLOYEE WHERE Ename
LIKE '%T%');
```

OUTPUT:-

```
mysql>
mysql> SELECT Eno , Ename
-> FROM EMPLOYEE
-> WHERE Dno IN (SELECT Dno FROM EMPLOYEE WHERE Ename LIKE '%T%');
+-----+
| Eno | Ename |
+-----+
| 736 | Smith  |
| 756 | Jones   |
| 787 | Adams   |
| 788 | Scott   |
| 792 | Ford    |
| 749 | Allan   |
| 752 | Ward    |
| 765 | Martin  |
| 769 | Blake   |
| 784 | Turner  |
| 790 | James   |
+-----+
11 rows in set (0.00 sec)
```

36. Query to display the names and salaries of all employees who report to supervisor named 'King'

Ans.

```
mysql> SELECT Ename , SALARY
-> FROM EMPLOYEE
-> WHERE Manager=(SELECT Eno FROM EMPLOYEE WHERE
Ename='King');
```

OUTPUT:-

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```
File Edit View Search Terminal Help
mysql>
mysql> SELECT Ename , SALARY
-> FROM EMPLOYEE
-> WHERE Manager=(SELECT Eno FROM EMPLOYEE WHERE Ename='King');
+-----+
| Ename | SALARY |
+-----+
| Jones | 2300.00 |
| Blake | 2870.00 |
| Clark | 2900.00 |
+-----+
3 rows in set (0.00 sec)
```

37. Query to display the department no, name and job for all employees in the Sales department

Ans.

```
mysql> SELECT E.Ename , D.Dno , E.Job_type
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE D.Dname='Sales' AND D.Dno=E.Dno ;
```

OUTPUT:-

```
mysql>
mysql> SELECT E.Ename , D.Dno , E.Job_type
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE D.Dname='Sales' AND D.Dno=E.Dno ;
+-----+-----+-----+
| Ename | Dno | Job_type |
+-----+-----+-----+
| Allan | 30 | Sales_man |
| Ward | 30 | Sales_man |
| Martin | 30 | Sales_man |
| Blake | 30 | Manager |
| Turner | 30 | Sales_man |
| James | 30 | Clerk |
+-----+-----+-----+
6 rows in set (0.00 sec)
```

38. Display names of employees along with their department name who have more than 20 years experience.

Ans.

```
mysql> SELECT E.Ename , D.Dname
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE DATEDIFF(NOW() , E.Hire_date) >= 20*365 AND
D.Dno=E.Dno ;
```

OUTPUT:-

ankita@ankita-bha

```
File Edit View Search Terminal Help
mysql>
mysql> SELECT E.Ename , D.Dname
-> FROM EMPLOYEE AS E , DEPARTMENT AS D
-> WHERE DATEDIFF(NOW() , E.Hire_date) >= 20*365 AND D.Dno=E.Dno ;
+-----+-----+
| Ename | Dname |
+-----+-----+
| Clark | Accounting
| King  | Accounting
| Smith | Research
| Jones | Research
| Adams | Research
| Scott | Research
| Ford  | Research
| Allan | Sales
| Ward  | Sales
| Martin| Sales
| Blake | Sales
| Turner| Sales
| James  | Sales
| Miller | Operation
+-----+-----+
14 rows in set (0.00 sec)
```

39. Display total number of departments at each location.

Ans .

```
mysql> SELECT Location , COUNT(*) AS Num_depts
-> FROM DEPARTMENT GROUP BY Location;
```

OUTPUT:-

ankita@anki

```
File Edit View Search Terminal Help
mysql>
mysql>
mysql> SELECT Location , COUNT(*) AS Num_depts
-> FROM DEPARTMENT GROUP BY Location;
+-----+-----+
| Location | Num_depts |
+-----+-----+
| New York | 1
| Dallas   | 1
| Chicago  | 1
| Boston   | 1
| New Delhi| 1
+-----+-----+
5 rows in set (0.00 sec)
```

40. Find the department name in which at least 20 employees work in.

Ans .

```
mysql> SELECT Dname
-> FROM DEPARTMENT
-> WHERE Dno IN (SELECT Dno FROM EMPLOYEE GROUP BY
Dno HAVING COUNT(*) >20);
```

OUTPUT:-

```
mysql>
mysql> SELECT Dname
-> FROM DEPARTMENT
-> WHERE Dno IN (SELECT Dno FROM EMPLOYEE GROUP BY Dno HAVING COUNT(*) >20);
Empty set (0.00 sec)
```

To show that command works accurately I have taken a variation of above query :

```
mysql> SELECT Dname
-> FROM DEPARTMENT
-> WHERE Dno IN (SELECT Dno FROM EMPLOYEE GROUP BY Dno HAVING
COUNT(*) >2);
```

```
mysql>
mysql> SELECT Dname
-> FROM DEPARTMENT
-> WHERE Dno IN (SELECT Dno FROM EMPLOYEE GROUP BY Dno HAVING COUNT(*) >2);
+-----+
| Dname   |
+-----+
| Research |
| Sales    |
+-----+
2 rows in set (0.00 sec)
```

41. Query to find the employee' name who is not supervisor and name of supervisor supervising more than 5 employees.

Ans .

```
mysql> ( SELECT Ename FROM EMPLOYEE WHERE Eno NOT IN
    (SELECT Manager FROM EMPLOYEE WHERE Manager IS NOT NULL) )
UNION (SELECT Ename FROM EMPLOYEE WHERE Eno IN (SELECT
Manager FROM EMPLOYEE WHERE Manager IS NOT NULL GROUP BY
Manager HAVING COUNT(*)>5)) ;
```

OUTPUT:-

```
mysql>
mysql> ( SELECT Ename FROM EMPLOYEE WHERE Eno NOT IN (SELECT Manager FROM EMPLOYEE WHERE Manager IS NOT NULL) ) UNION (SELECT Ename FROM EMPLOYEE W
HERE Eno IN (SELECT Manager FROM EMPLOYEE WHERE Manager IS NOT NULL GROUP BY Manager HAVING COUNT(*)>5));
+-----+
| Ename |
+-----+
| Smith |
| Allan |
| Ward  |
| Martin|
| Turner|
| Adams |
| Ford   |
| Miller|
+-----+
8 rows in set (0.00 sec)
```

42. Query to display the job type with maximum and minimum employees .

Ans .

```
mysql> SELECT MIN(Job_type) AS MIN , MAX(Job_type) AS MAX
-> FROM EMPLOYEE;
```

OUTPUT:-

```
mysql>
mysql> SELECT MIN(Job_type) AS MIN , MAX(Job_type) AS MAX
-> FROM EMPLOYEE;
+-----+-----+
| MIN   | MAX    |
+-----+-----+
| Analyst | Sales_man |
+-----+-----+
1 row in set (0.00 sec)
```