## **QUESTION NO 04 [CHEATS DBMS]**

Q.4 Design Employee database as shown below

Empid	Ename	Dept	date_of_joi n	Salar y
1	sunil	Marketing	1-jan	5000 0
2	supriya	Manager	3-jan	8000 0
3	sonia	Accounts	4-jan	2000 0
4	suraj	Sales	5-jan	3400 0
5	priya	IT_Sector	8-mar	6000 0
6	viren	Governm ent	2-mar	1200 0

Emp details

Empid	Education	Marks
1	MTech	80
2	PhD	79
3	BE	78

Evaluate any 5 Queries on above DB

- 1)Find names of employee starting with letter s and end with a
- 2)Find names of employee whose names begin with s and followed by exactly four character
- 3)Find name of employee having salary between 10000 to 30000
- 4)Cretae index named as idx\_emp using field empid
- 5)Find avg salary of all employees
- 6)Find avg marks of each employee along with the name of employee

## **ANSWER:-**

```
mysql> show databases;
+----+
| Database |
+----+
assi10
cheat3
| information schema |
mysql
performance schema
student
sys
+----+
7 rows in set (0.00 \text{ sec})
mysql> create database cheat4;
Query OK, 1 row affected (0.01 sec)
mysql> use cheat4;
Database changed
mysql> create table employee(Empid int ,Ename varchar(20),dept varchar(20),date of join
varchar(20), salary int);
Query OK, 0 rows affected (0.04 sec)
mysql> insert into employee values(1,"sunil","marketing","1-jan",50000);
Query OK, 1 row affected (0.07 sec)
mysql> insert into employee values(2,"supriya","manager","3-jan",80000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into employee values(3, "sonia", "accounts", "4-jan", 20000);
Query OK, 1 row affected (0.01 sec)
mysql> insert into employee values(4,"suraj", "sales", "5-jan", 34000);
Query OK, 1 row affected (0.06 sec)
mysql> insert into employee values(5,"priya","IT_sector","8-mar",60000);
Query OK, 1 row affected (0.01 sec)
mysql> insert into employee values(6,"viren","government","2-mar",12000);
Ouery OK, 1 row affected (0.01 sec)
mysql> select * from employee;
+----+
| Empid | Ename | dept | date_of_join | salary |
```

```
+----+
  1 | sunil | marketing | 1-jan
                          | 50000 |
                         | 80000 |
  2 | supriya | manager | 3-jan
  3 | sonia | accounts | 4-jan
                          | 20000 |
                        | 34000 |
  4 | suraj | sales
               | 5-jan
  5 | priya | IT_sector | 8-mar
                        | 60000 |
  6 | viren | government | 2-mar
                          | 12000 |
+----+
6 rows in set (0.00 \text{ sec})
mysql> desc employee;
+----+
| Field
       | Type
               | Null | Key | Default | Extra |
+----+
| Empid
         | int
               |YES | |NULL |
| Ename
        | varchar(20) | YES | NULL |
dept
       | varchar(20) | YES | NULL |
| date_of_join | varchar(20) | YES | NULL |
| salary | int
            |YES | NULL | |
+----+
5 rows in set (0.00 \text{ sec})
mysql> create table Emp_details(Empid int,Education varchar(20),marks int);
Query OK, 0 rows affected (0.11 sec)
mysql> insert into Emp details values(1,"Mtech",80);
Query OK, 1 row affected (0.01 sec)
mysql> insert into Emp_details values(2,"phD",79);
Query OK, 1 row affected (0.07 sec)
mysql> insert into Emp_details values(3,"BE",78);
Query OK, 1 row affected (0.01 sec)
mysql> desc Emp_details;
+----+
| Field | Type | Null | Key | Default | Extra |
+----+
| Empid | int
              |YES | NULL |
| Education | varchar(20) | YES | | NULL |
      | int
           |YES | |NULL |
marks
+-----+
3 \text{ rows in set } (0.00 \text{ sec})
mysql> select * from Emp_details;
+----+
| Empid | Education | marks |
+----+
  1 | Mtech | 80 |
```

```
2 | phD
           | 79|
   3 | BE | 78 |
+----+
3 rows in set (0.00 \text{ sec})
mysql> SELECT Ename FROM employee WHERE Ename LIKE "s%a";
+----+
| Ename |
+----+
| supriya |
| sonia |
+----+
2 rows in set (0.00 \text{ sec})
mysql> show databases;
+----+
| Database |
+----+
assi10
cheat3
| information_schema |
mysql
performance schema
student
sys
+----+
7 rows in set (0.00 \text{ sec})
mysql> create database cheat4;
Query OK, 1 row affected (0.01 sec)
mysql> use cheat4;
Database changed
mysql> create table employee(Empid int ,Ename varchar(20),dept varchar(20),date_of_join
varchar(20), salary int);
Query OK, 0 rows affected (0.04 sec)
mysql> insert into employee values(1,"sunil","marketing","1-jan",50000);
Query OK, 1 row affected (0.07 sec)
mysql> insert into employee values(2,"supriya","manager","3-jan",80000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into employee values(3,"sonia","accounts","4-jan",20000);
Query OK, 1 row affected (0.01 sec)
mysql> insert into employee values(4,"suraj","sales","5-jan",34000);
Ouery OK, 1 row affected (0.06 sec)
mysql> insert into employee values(5, "priya", "IT sector", "8-mar", 60000);
```

```
Query OK, 1 row affected (0.01 sec)
mysql> insert into employee values(6,"viren","government","2-mar",12000);
Ouery OK, 1 row affected (0.01 sec)
mysql> select * from employee;
+----+
| Empid | Ename | dept | date_of_join | salary |
+----+
  1 | sunil | marketing | 1-jan | 50000 |
  2 | supriya | manager | 3-jan
                          | 80000 |
  3 | sonia | accounts | 4-jan
                           | 20000 |
               | 5-jan
  4 | suraj | sales
                         | 34000 |
  5 | priya | IT sector | 8-mar | 60000 |
  6 | viren | government | 2-mar
                          | 12000 |
+----+
6 rows in set (0.00 \text{ sec})
mysql> desc employee;
+----+
      | Type | Null | Key | Default | Extra |
+----+
| Empid
        | int
               |YES | NULL | |
         | varchar(20) | YES | NULL |
| Ename
        | varchar(20) | YES | NULL |
dept
| date of join | varchar(20) | YES | | NULL |
salary | int | YES | NULL |
+----+
5 rows in set (0.00 \text{ sec})
mysql> create table Emp_details(Empid int,Education varchar(20),marks int);
Query OK, 0 rows affected (0.11 sec)
mysql> insert into Emp details values(1,"Mtech",80);
Query OK, 1 row affected (0.01 sec)
mysql> insert into Emp_details values(2,"phD",79);
Ouery OK, 1 row affected (0.07 sec)
mysql> insert into Emp_details values(3,"BE",78);
Query OK, 1 row affected (0.01 sec)
mysql> desc Emp_details;
+----+
| Field | Type
              | Null | Key | Default | Extra |
+-----+
| Empid | int
             |YES | |NULL |
| Education | varchar(20) | YES | | NULL |
```

marks

| int

|YES | |NULL |

```
+----+
3 \text{ rows in set } (0.00 \text{ sec})
mysql> select * from Emp_details;
+----+
| Empid | Education | marks |
+----+
  1 | Mtech | 80 |
   2 | phD | 79 |
  3 | BE
         | 78 |
+----+
3 \text{ rows in set } (0.00 \text{ sec})
mysql> SELECT Ename FROM employee WHERE Ename LIKE "s%a";
+----+
| Ename |
+----+
| supriya |
| sonia |
+----+
2 \text{ rows in set } (0.00 \text{ sec})
mysql> SELECT Ename FROM employee WHERE Ename LIKE "s----";
Empty set (0.00 sec)
mysql> SELECT Ename FROM employee WHERE Ename LIKE "s_____";
+----+
| Ename |
+----+
| sunil |
| sonia |
| suraj |
+----+
3 \text{ rows in set } (0.00 \text{ sec})
mysql> SELECT Ename FROM employee WHERE salary BETWEEN 10000 AND 30000;
+----+
| Ename |
+----+
| sonia |
| viren |
+----+
2 rows in set (0.00 sec)
mysql> CREATE INDEX idx_emp ON employee(Empid);
Query OK, 0 rows affected (0.10 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> SELECT AVG(salary) AS AVG_SALARY FROM employee;
```

```
+----+
| AVG SALARY |
+----+
| 42666.6667 |
+----+
1 row in set (0.00 sec)
mysql> SELECT e.Ename, AVG(d.marks) AS Average_marks
  -> FROM employee e
  -> JOIN Emp_details d ON e.Empid=d.Empid
  -> GROUP BY e.Empid,e.Ename;
+----+
| Ename | Average_marks |
+----+
| sunil |
          80.0000 |
           79.0000 |
| supriya |
| sonia |
           78.0000 |
+----+
3 \text{ rows in set } (0.00 \text{ sec})
mysql>
mysql> SELECT Ename FROM employee WHERE Ename LIKE "s----";
Empty set (0.00 sec)
mysql> SELECT Ename FROM employee WHERE Ename LIKE "s_____";
+----+
| Ename |
+----+
| sunil |
| sonia |
| suraj |
+----+
3 \text{ rows in set } (0.00 \text{ sec})
mysql> SELECT Ename FROM employee WHERE salary BETWEEN 10000 AND 30000;
+----+
| Ename |
+----+
| sonia |
| viren |
+----+
2 rows in set (0.00 \text{ sec})
mysql> CREATE INDEX idx_emp ON employee(Empid);
Query OK, 0 rows affected (0.10 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> SELECT AVG(salary) AS AVG_SALARY FROM employee;
```

```
+----+
| AVG_SALARY |
+----+
| 42666.6667 |
+----+
1 row in set (0.00 sec)
mysql> SELECT e.Ename, AVG(d.marks) AS Average_marks
 -> FROM employee e
  -> JOIN Emp_details d ON e.Empid=d.Empid
 -> GROUP BY e.Empid,e.Ename;
+----+
| Ename | Average_marks |
+----+
          80.0000 |
| sunil |
          79.0000 |
| supriya |
| sonia |
          78.0000 |
+----+
3 \text{ rows in set } (0.00 \text{ sec})
```

mysql>