**Relationship Queries:**

**Task No:1**

**CREATE NEW TABLE:**

mysql> create table dept(dno int primary key,dname varchar(20),loc varchar(10));

Query OK, 0 rows affected (0.08 sec)

mysql> desc dept;

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

| Field | Type | Null | Key | Default | Extra |

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

| dno | int | NO | PRI | NULL | |

| dname | varchar(20) | YES | | NULL | |

| loc | varchar(10) | YES | | NULL | |

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

3 rows in set (0.01 sec)

mysql> INSERT INTO dept(dno, dname, loc) VALUES (101, 'computer', 'pune'),(102, 'computer Science', 'mumbai'),(103, 'Quality', 'London');

Query OK, 3 rows affected (0.01 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select\* from dept;

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

| dno | dname | loc |

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

| 101 | computer | pune |

| 102 | computer Science | mumbai |

| 103 | Quality | London |

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

3 rows in set (0.00 sec)

mysql> create table emplo(eno int primary key,ename varchar(20),designation varchar(20),salary int,date\_of\_joining varchar(20),dno int references dept(dno));

Query OK, 0 rows affected (0.04 sec)

mysql> desc emplo;

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

| Field | Type | Null | Key | Default | Extra |

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

| eno | int | NO | PRI | NULL | |

| ename | varchar(20) | YES | | NULL | |

| designation | varchar(20) | YES | | NULL | |

| salary | int | YES | | NULL | |

| date\_of\_joining | varchar(20) | YES | | NULL | |

| dno | int | YES | | NULL | |

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

6 rows in set (0.01 sec)

mysql> INSERT INTO emplo(eno, ename, designation, salary, date\_of\_joining, dno) VALUES (1, 'Suhani', 'assistant', 50000, '2020-01-01', 101),(2, 'Angha', 'CEO', 20000, '2020-02-01', 102),(3, 'Anuja', 'Manager', 90000, '2020-03-01', 103),(4, 'Vidya', 'Tester', 80000, '2020-04-01', 104);

Query OK, 4 rows affected (0.05 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> select\* from emplo;

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

| eno | ename | designation | salary | date\_of\_joining | dno |

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

| 1 | Suhani | assistant | 50000 | 2020-01-01 | 101 |

| 2 | Angha | CEO | 20000 | 2020-02-01 | 102 |

| 3 | Anuja | Manager | 90000 | 2020-03-01 | 103 |

| 4 | Vidya | Tester | 80000 | 2020-04-01 | 104 |

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

4 rows in set (0.00 sec)

**Q 1. Add column Phone\_no into emp table with data type int.**

mysql> alter table emplo

-> add phone\_no int(11);

Query OK, 0 rows affected, 1 warning (0.04 sec)

Records: 0 Duplicates: 0 Warnings: 1

mysql> desc emplo;

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

| Field | Type | Null | Key | Default | Extra |

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

| eno | int | NO | PRI | NULL | |

| ename | varchar(20) | YES | | NULL | |

| designation | varchar(20) | YES | | NULL | |

| salary | int | YES | | NULL | |

| date\_of\_joining | varchar(20) | YES | | NULL | |

| dno | int | YES | | NULL | |

| phone\_no | int | YES | | NULL | |

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

7 rows in set (0.00 sec)

**Q 2.Update Phone\_no.**

mysql> update emplo

-> set phone\_no=1234567890

-> where eno=1;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update emplo

-> set phone\_no= 1234567890

-> where eno=2;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update emplo

-> set phone\_no= 1234567890

-> where eno=3;

Query OK, 1 row affected (0.00 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> update emplo

-> set phone\_no= 1234567890

-> where eno=4;

Query OK, 1 row affected (0.18 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select\* from emplo;

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

| eno | ename | designation | salary | date\_of\_joining | dno | phone\_no |

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

| 1 | Suhani | assistant | 50000 | 2020-01-01 | 101 | 1234567890 |

| 2 | Angha | CEO | 20000 | 2020-02-01 | 102 | 1234567890 |

| 3 | Anuja | Manager | 90000 | 2020-03-01 | 103 | 1234567890 |

| 4 | Vidya | Tester | 80000 | 2020-04-01 | 104 | 1234567890 |

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

4 rows in set (0.00 sec)

**Q 3. Delete the details of employee whose designation is manager.**

mysql> DELETE FROM emplo WHERE designation = 'Manager';

Query OK, 1 row affected (0.11 sec)

mysql> select\* from emplo;

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

| eno | ename | designation | salary | date\_of\_joining | dno | phone\_no |

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

| 1 | Suhani | assistant | 50000 | 2020-01-01 | 101 | 1234567890 |

| 2 | Angha | CEO | 20000 | 2020-02-01 | 102 | 1234567890 |

| 4 | Vidya | Tester | 80000 | 2020-04-01 | 104 | 1234567890 |

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

3 rows in set (0.00 sec)

**Q 4. Display the count of employee department wise.**

mysql> select count(eno),dname

-> from emplo,dept

-> where emplo.dno=dept.dno

-> group by dname;

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

| count(eno) | dname |

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

| 1 | computer |

| 1 | computer Science |

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

2 rows in set (0.00 sec)

**Q 4. Display the count of employee department**

mysql> select ename,dname

-> from emplo,dept

-> where emplo.dno=dept.dno and designation='ceo' and dname='computer';

Empty set (0.00 sec)

**Q 5. Display the name of employee who is ‘CEO’ of ‘account ‘Computer Science’.**

mysql> select ename,dname

-> from emplo,dept

-> where emplo.dno=dept.dno and designation='ceo' and dname='computer science';

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

| ename | dname |

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

| Angha | computer Science |

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

1 row in set (0.00 sec)

**Q 6. Display the name of department whose locatiob is ‘pune’ of suhani is working it.**

mysql> select ename,dname

-> from emplo,dept

-> where emplo.dno=dept.dno and loc='pune' and ename='suhani';

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

| ename | dname |

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

| Suhani | computer |

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

1 row in set (0.00 sec)

**Q 7. Display the names of employee whose salary is greater then 50000 and department is ’Quality’.**

mysql> select ename,dname

-> from emplo,dept

-> where emplo.dno=dept.dno and salary>90000 and dname='Quality';

Empty set (0.00 sec)

**Q 8. Update date of joining of employee to’15/06/2019’ whose department is ‘computer science’and name is ‘angha’.**

mysql> UPDATE emplo SET date\_of\_joining = '2019-06-15' WHERE dno = (SELECT dno FROM dept WHERE dname = 'Computer Science') AND ename = 'angha';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select\* from emplo;

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

| eno | ename | designation | salary | date\_of\_joining | dno | phone\_no |

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

| 1 | Suhani | assistant | 50000 | 2020-01-01 | 101 | 1234567890 |

| 2 | Angha | CEO | 20000 | 2019-06-15 | 102 | 1234567890 |

| 4 | Vidya | Tester | 80000 | 2020-04-01 | 104 | 1234567890 |

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

3 rows in set (0.00 sec)

**Task-2**

**Create table Sales\_order.**

mysql> use sales;

Database changed

mysql> create table sales\_order(ordNo int,ordDate int,Sales\_order int);

Query OK, 0 rows affected (0.05 sec)

mysql> desc sales\_order;

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

| Field | Type | Null | Key | Default | Extra |

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

| ordNo | int | YES | | NULL | |

| ordDate | int | YES | | NULL | |

| Sales\_order | int | YES | | NULL | |

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

3 rows in set (0.00 sec)

mysql> insert into sales\_order(ordno,ordDate,sales\_order,sales\_amt)values(101,2020-3-4,2,1000),(102,2019-1-4,3,3000),(103,2021-1-5,2,1200),(104,2020-4-4,2,1100);

Query OK, 4 rows affected (0.02 sec)

Records: 4 Duplicates: 0 Warnings: 0

mysql> select\*from sales\_order;

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

| ordno | ordDate | Sales\_order | sales\_amt |

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

| 101 | 2013 | 2 | 1000 |

| 102 | 2014 | 3 | 3000 |

| 103 | 2015 | 2 | 1200 |

| 104 | 2012 | 2 | 1100 |

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

4 rows in set (0.00 sec)

**Create table client-**

mysql> create table Client(clientNo int primary key,clientName varchar(20),Addr varchar(20));

Query OK, 0 rows affected (0.05 sec)

mysql> desc client;

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

| Field | Type | Null | Key | Default | Extra |

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

| clientNo | int | NO | PRI | NULL | |

| clientName | varchar(20) | YES | | NULL | |

| Addr | varchar(20) | YES | | NULL | |

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

3 rows in set (0.00 sec)

mysql> insert into client(clientNo,clientName,Addr)values(101,'Anuu','Pune'),(102,'Anushka','Satara'),(103,'Radha','Landan');

Query OK, 3 rows affected (0.01 sec)

Records: 3 Duplicates: 0 Warnings: 0

mysql> select\* from client;

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

| clientNo | clientName | Addr |

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

| 101 | Anuu | Pune |

| 102 | Anushka | Satara |

| 103 | Radha | Landan |

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

3 rows in set (0.00 sec)

**1.Add column amount into sales\_order table with data tyape Float.**

mysql> alter table sales\_order

-> add sales\_amt float;

Query OK, 0 rows affected (0.02 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc sales\_order;

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

| Field | Type | Null | Key | Default | Extra |

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

| ordno | int | NO | PRI | NULL | |

| ordDate | int | YES | | NULL | |

| Sales\_order | int | YES | | NULL | |

| sales\_amt | float | YES | | NULL | |

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

4 rows in set (0.00 sec)

**2.Delete the details of the clients whoses start with ‘A’ character.**

mysql> delete from client

-> where clientName like'A%';

Query OK, 2 rows affected (0.01 sec)

mysql> select\* from client;

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

| clientNo | clientName | Addr |

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

| 103 | Radha | Landan |

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

1 row in set (0.00 sec)

**3.Delete sales order details of client whose name is ‘Anuu’ and order is “2012’’.**

mysql> DELETE client, sales\_order FROM client, sales\_order WHERE client.clientNo = sales\_order.clientNo AND clientname = 'Anuu' AND sales\_order.ordDate = '2012';

Query OK, 0 rows affected (0.00 sec)

mysql> select\* from client;

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

| clientNo | clientName | Addr |

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

| 101 | Anuu | Pune |

| 102 | Anushka | Satara |

| 103 | Radha | Landan |

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

3 rows in set (0.00 sec)

**4. Change address of clientNo’102’ ,‘Dubai’.**

mysql> update client set Addr='dubai' where clientNo=102;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select\* from client;

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

| clientNo | clientName | Addr |

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

| 101 | Anuu | Pune |

| 102 | Anushka | dubai |

| 103 | Radha | Landan |

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

3 rows in set (0.00 sec)

**5. Delete all sales\_record having order date is before’2014’**

mysql> delete from sales\_order

-> where orddate<'2014';

Query OK, 2 rows affected (0.01 sec)

mysql> select\* from sales\_order;

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

| ordno | ordDate | Sales\_order | sales\_amt | clientNo |

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

| 102 | 2014 | 3 | 3000 | 102 |

| 103 | 2015 | 2 | 1200 | 103 |

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

2 rows in set (0.00 sec)

**6. Update the address of client to’mumbai’ whose clientno=101;**

mysql> update client

-> set addr='mumbai'

-> where clientNo=101;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select\* from client;

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

| clientNo | clientName | Addr |

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

| 101 | Anuu | mumbai |

| 102 | Anushka | dubai |

| 103 | Radha | Landan |

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

3 rows in set (0.00 sec)

**7. display totals ordes 2014.**

mysql> select count(\*) as Total

-> from sales\_order,client

-> where client.clientNo=sales\_order.clientNo and orddate=2014;

+-------+

| Total |

+-------+

| 1 |

+-------+

1 row in set (0.00 sec)

**8. Display totals sale amount between 2014 to 2015.**

mysql> select sum(sales\_amt)As sales\_order

-> from sales\_order

-> where orddate>='2014' and orddate<='2015';

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

| sales\_order |

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

| 4200 |

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

1 row in set (0.00 sec)

**9. Display total no customers from pune location.**

where addr='dubai'' at line 1

mysql> SELECT COUNT(\*) AS total\_clientname FROM client WHERE addr = 'dubai';

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

| total\_clientname |

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

| 1 |

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

1 row in set (0.00 sec)

**Task-3**

mysql> show databases;

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

| Database |

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

| amitdb |

| book |

| e |

| employee |

| hospital |

| information\_schema |

| mysql |

| oit |

| patient |

| performance\_schema |

| sales |

| stud\_demo |

| student |

| sys |

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

14 rows in set (0.01 sec)

mysql> use hospital;

Database changed

**Create Table Hospital:**

mysql> desc hospital;

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

| Field | Type | Null | Key | Default | Extra |

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

| hno | int | NO | PRI | NULL | |

| hname | varchar(20) | YES | | NULL | |

| city | varchar(20) | YES | | NULL | |

| Est\_year | int | YES | | NULL | |

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

4 rows in set (0.01 sec)

mysql> select\* from hospital;

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

| hno | hname | city | Est\_year | addr |

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

| 101 | Krishna | satara | 2000 | vaduj |

| 102 | BJ Katkar | Sangli | 2012 | Dahiwadi |

| 103 | Sanjivan | Pune | 2012 | Dahiwadi |

| 104 | Spandan | Kolhapur | 2022 | Katarkhatav |

| 105 | Bharti | Pune | 2024 | Varud |

| 106 | Deva | Beed | 2018 | Dhane |

| 107 | Kaji | Solapur | 2023 | karad |

| 108 | Dhiru | Mumbai | 2024 | Pusegav |

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

8 rows in set (0.06 sec)

**Create Table Doctor:**

mysql> desc doctor;

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

| Field | Type | Null | Key | Default | Extra |

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

| Dno | int | NO | PRI | NULL | |

| Dname | varchar(20) | YES | | NULL | |

| Addr | varchar(20) | YES | | NULL | |

| Speaciality | varchar(52) | YES | | NULL | |

| Salary | int | YES | | NULL | |

| hno | int | YES | | NULL | |

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

6 rows in set (0.00 sec)

mysql> select\* from doctor;

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

| Dno | Dname | Addr | Speaciality | Salary | hno |

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

| 1 | Vaibhav | satara | Teeth | 70000 | 101 |

| 2 | Shubham | pune | Eyes | 80000 | 102 |

| 3 | Pavan | solapur | Skin | 50000 | 103 |

| 4 | Amit | dhane | Airs | 90000 | 104 |

| 5 | tejas | mumbai | bone | 55000 | 105 |

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

5 rows in set (0.01 sec)

**Q 1.Delete Add column from Hospital table.**

mysql> alter table hospital

-> drop addr

-> ;

Query OK, 0 rows affected (0.03 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> select\* from hospital;

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

| hno | hname | city | Est\_year |

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

| 101 | Krishna | satara | 2000 |

| 102 | BJ Katkar | Sangli | 2012 |

| 103 | Sanjivan | Pune | 2012 |

| 104 | Spandan | Kolhapur | 2022 |

| 105 | Bharti | Pune | 2024 |

| 106 | Deva | Beed | 2018 |

| 107 | Kaji | Solapur | 2023 |

| 108 | Dhiru | Mumbai | 2024 |

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

8 rows in set (0.00 sec)

**Q 2.Display Doctor name, hospital name and speacilty of doctors from “pune city”.**

mysql> select Dname,hname,speaciality

-> from doctor,hospital

-> where city='Pune' and addr='pune';

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

| Dname | hname | speaciality |

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

| Shubham | Sanjivan | Eyes |

| Shubham | Bharti | Eyes |

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

2 rows in set (0.00 sec)

**Q 3. Display the names of the hospitals which are located at ‘pune’ city.**

mysql> select hname

-> from hospital

-> where city='beed';

+-------+

| hname |

+-------+

| Deva |

+-------+

1 row in set (0.00 sec)

**Q 4. Display the names of the doctors who are working in ‘solapur’ and name is’pune’.**

mysql> select dname

-> from doctor

-> where addr='solapur' and dname='pavan';

+-------+

| dname |

+-------+

| Pavan |

+-------+

1 row in set (0.00 sec)

**Q 5.Display the speacility of the doctors who working in ‘mumbai’ hospital.**

mysql> select speaciality

-> from doctor

-> where addr='mumbai';

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

| speaciality |

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

| bone |

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

1 row in set (0.00 sec)

**Q 6. Give the count of doctor’s hospital wise which are located at ’ Mumbai’.**

mysql> select count(\*) hno

-> from doctor,hospital

-> where hospital.hno=doctor.hno and addr='mumbai' group by hname;

+-----+

| hno |

+-----+

| 1 |

+-----+

1 row in set (0.00 sec)

**Q 7. Update an address of doctor to “ Amit“ whose hospital is” Pimpari “.**

mysql> update doctor

-> set addr='pimpri'

-> where dname='amit';

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select\* from doctor;

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

| Dno | Dname | Addr | Speaciality | Salary | hno |

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

| 1 | Vaibhav | satara | Teeth | 70000 | 101 |

| 2 | Shubham | pune | Eyes | 80000 | 102 |

| 3 | Pavan | solapur | Skin | 50000 | 103 |

| 4 | Amit | pimpri | Airs | 90000 | 104 |

| 5 | tejas | mumbai | bone | 55000 | 105 |

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

5 rows in set (0.00 sec)

**Q 8. Display doctor details whose speaciality is skin and whole belong to hospital from Solapur.**

mysql> select\*

-> from doctor

-> where speaciality='skin' and addr='solapur';

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

| Dno | Dname | Addr | Speaciality | Salary | hno |

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

| 3 | Pavan | solapur | Skin | 50000 | 103 |

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

1 row in set (0.00 sec)

**Q 9. Update an address of hospital ‘dubai’ whose hospital is established in 2000.**

mysql> update hospital

-> set city='dubai'

-> where Est\_year=2000;

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

mysql> select\* from hospital;

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

| hno | hname | city | Est\_year |

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

| 101 | Krishna | dubai | 2000 |

| 102 | BJ Katkar | Sangli | 2012 |

| 103 | Sanjivan | Pune | 2012 |

| 104 | Spandan | Kolhapur | 2022 |

| 105 | Bharti | Pune | 2024 |

| 106 | Deva | Beed | 2018 |

| 107 | Kaji | Solapur | 2023 |

| 108 | Dhiru | Mumbai | 2024 |

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

8 rows in set (0.00 sec)

**Q 10. Display Total salary of all doctors hospitalwise.**

mysql> select salary

-> from hospital,doctor;

+--------+

| salary |

+--------+

| 55000 |

| 90000 |

| 50000 |

| 80000 |

| 70000 |

| 55000 |

| 90000 |

| 50000 |

| 80000 |

| 70000 |

| 55000 |

| 90000 |

| 50000 |

| 80000 |

| 70000 |

| 55000 |

| 90000 |

| 50000 |

| 80000 |

| 70000 |

| 55000 |

| 90000 |

| 50000 |

| 80000 |

| 70000 |

| 55000 |

| 90000 |

| 50000 |

| 80000 |

| 70000 |

| 55000 |

| 90000 |

| 50000 |

| 80000 |

| 70000 |

| 55000 |

| 90000 |

| 50000 |

| 80000 |

| 70000 |

+--------+

40 rows in set (0.00 sec)

**Q 11. Display annual salary of doctor who live in pune.**

mysql> SELECT salary \* 12 AS annual\_salary FROM doctor;

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

| annual\_salary |

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

| 840000 |

| 960000 |

| 600000 |

| 1080000 |

| 660000 |

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

5 rows in set (0.00 sec)

**Task-4**

mysql> show databases;

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

| Database |

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

| amitdb |

| book |

| e |

| employee |

| hospital |

| information\_schema |

| mysql |

| oit |

| patient |

| performance\_schema |

| project |

| sales |

| stud\_demo |

| student |

| sys |

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

15 rows in set (0.01 sec)

mysql> use project;

Database changed

**Create table Project:**

mysql> create table project(pno int primary key,pname varchar(20),start\_date varchar(20),budget int,status varchar(20),dno int);

Query OK, 0 rows affected (0.06 sec)

mysql> desc project;

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

| Field | Type | Null | Key | Default | Extra |

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

| pno | int | NO | PRI | NULL | |

| pname | varchar(20) | YES | | NULL | |

| start\_date | varchar(20) | YES | | NULL | |

| budget | int | YES | | NULL | |

| status | varchar(20) | YES | | NULL | |

| dno | int | YES | | NULL | |

mysql> insert into project(pno,pname,start\_date,budget,status,dno)values(1,'komal','12-10-2020',20000,'event management',101),(2,'rutuja','12-12-2020',200000,'hotel management',102),(3,'sai','2-3-2020',200000,'hostel management',103),(4,'om','2-4-2024',400000,'beauty management',104),(5,'yash','1-2-2020',200000,'library management',105),(6,'mahi','2-3-2010',200000,'e-commerce',106);

Query OK, 6 rows affected (0.01 sec)

Records: 6 Duplicates: 0 Warnings: 0

mysql> select\* from project;

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

| pno | pname | start\_date | budget | status | dno |

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

| 1 | komal | 12-10-2020 | 20000 | event management | 101 |

| 2 | rutuja | 12-12-2020 | 200000 | hotel management | 102 |

| 3 | sai | 2-3-2020 | 200000 | hostel management | 103 |

| 4 | om | 2-4-2024 | 400000 | beauty management | 104 |

| 5 | yash | 1-2-2020 | 200000 | library management | 105 |

| 6 | mahi | 2-3-2010 | 200000 | e-commerce | 106 |

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

6 rows in set (0.00 sec)

**Create table Department:**

mysql> create table department(dno int primary key,dname varchar(20),HOD varchar(20),loc varchar(20));

Query OK, 0 rows affected (0.12 sec)

mysql> desc department;

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

| Field | Type | Null | Key | Default | Extra |

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

| dno | int | NO | PRI | NULL | |

| dname | varchar(20) | YES | | NULL | |

| HOD | varchar(20) | YES | | NULL | |

| loc | varchar(20) | YES | | NULL | |

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

4 rows in set (0.01 sec)

mysql> insert into department(dno,dname,HOD,loc)values(101,'commerce','Sonal Shinde','satara'),(102,'Science','uday bagal','pune'),(103,'Art','Sonali kamble','mumbai'),(104,'commerceIT','shivam Shinde','pathak'),(105,'medical','om patil','kolhapur');

Query OK, 5 rows affected (0.00 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> select\* from department;

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

| dno | dname | HOD | loc |

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

| 101 | commerce | Sonal Shinde | satara |

| 102 | Science | uday bagal | pune |

| 103 | Art | Sonali kamble | mumbai |

| 104 | commerceIT | shivam Shinde | pathak |

| 105 | medical | om patil | kolhapur |

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

5 rows in set (0.00 sec)

**Q 1. Drop loc column from department table.**

mysql> alter table department

-> drop column loc;

Query OK, 0 rows affected (0.55 sec)

Records: 0 Duplicates: 0 Warnings: 0

mysql> desc department;

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

| Field | Type | Null | Key | Default | Extra |

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

| dno | int | NO | PRI | NULL | |

| dname | varchar(20) | YES | | NULL | |

| HOD | varchar(20) | YES | | NULL | |

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

3 rows in set (0.00 sec)

**Q 2. Display the details of project whose start\_date is before one month and status is’e-commerce’.**

mysql> select\*

-> from project

-> where start\_date>14-5-2020 and status='beauty management';

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

| pno | pname | start\_date | budget | status | dno |

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

| 4 | om | 2-4-2024 | 400000 | beauty management | 104 |

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

1 row in set, 1 warning (0.01 sec)

**Q 3. Display the names of project and department who are worked on project whose status hotel management.**

mysql> SELECT pname, dname FROM department, project WHERE project.dno = department.dno AND status = 'hotel management';

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

| pname | dname |

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

| rutuja | Science |

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

1 row in set (0.00 sec)

**Q 4. Display total budget of each department.**

mysql> select sum(budget)

-> from project,department

-> where project.dno=department.dno

-> group by dname;

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

| sum(budget) |

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

| 20000 |

| 200000 |

| 200000 |

| 400000 |

| 200000 |

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

5 rows in set (0.00 sec)

**Q 5. Display incomplete project of each department**

mysql> select\* from project

-> where status='event management';

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

| pno | pname | start\_date | budget | status | dno |

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

| 1 | komal | 12-10-2020 | 20000 | event management | 101 |

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

1 row in set (0.00 sec)

**Q 6.Display All project working under ‘om patil’.**

mysql> select pname

-> from department,project

-> where department.dno=project.dno and HOD='om patil';

+-------+

| pname |

+-------+

| yash |

+-------+

1 row in set (0.00 sec)

**Q 7. Display Department Wise HOD.**

mysql> select dname,HOD

-> from department,project

-> where department.dno=project.dno order by dname;

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

| dname | HOD |

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

| Art | Sonali kamble |

| commerce | Sonal Shinde |

| commerceIT | shivam Shinde |

| medical | om patil |

| Science | uday bagal |

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

5 rows in set (0.00 sec)

**Q 8. Display project details where project name start with A and whose budget is>10000 in desending order.**

mysql> select\*

-> from project

-> where pname like 's%' AND budget>20000

-> order by budget desc;

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

| pno | pname | start\_date | budget | status | dno |

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

| 3 | sai | 2-3-2020 | 200000 | hostel management | 103 |

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

1 row in set (0.00 sec)

**Q 9. Display the project details whose having highest budgets.**

mysql> SELECT \* FROM project WHERE budget = (SELECT MAX(budget) FROM project);

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

| pno | pname | start\_date | budget | status | dno |

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

| 4 | om | 2-4-2024 | 400000 | beauty management | 104 |

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

1 row in set (0.01 sec)

**Task-5**

**Create Databases Customer:**

mysql> create database customer;

Query OK, 1 row affected (0.02 sec)

mysql> use customer;

Database changed

**Create Table Customer:**

mysql> create table customer(cno int primary key,cname varchar(20),address varchar(20),city varchar(20));

Query OK, 0 rows affected (0.07 sec)

mysql> desc customer;

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

| Field | Type | Null | Key | Default | Extra |

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

| cno | int | NO | PRI | NULL | |

| cname | varchar(20) | YES | | NULL | |

| address | varchar(20) | YES | | NULL | |

| city | varchar(20) | YES | | NULL | |

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

4 rows in set (0.01 sec)

mysql> insert into customer(cno,cname,address,city)values(101,'komal','satara','pune'),(102,'vidya','thane','satara'),(103,'shivani','dahiwadi','wai'),(104,'mayara','vaduj','solapur'),(105,'soham','varud','Solapur');

Query OK, 5 rows affected (0.02 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> select\* from customer;

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

| cno | cname | address | city |

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

| 101 | komal | satara | pune |

| 102 | vidya | thane | satara |

| 103 | shivani | dahiwadi | wai |

| 104 | mayara | vaduj | solapur |

| 105 | soham | varud | Solapur |

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

5 rows in set (0.00 sec)

**Create Table Loan:**

mysql> create table loan(lno int primary key,loan\_amt int);

Query OK, 0 rows affected (0.04 sec)

mysql> desc loan;

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

| Field | Type | Null | Key | Default | Extra |

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

| lno | int | NO | PRI | NULL | |

| loan\_amt | int | YES | | NULL | |

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

2 rows in set (0.00 sec)

mysql> insert into loan(lno,loan\_amt)values(1,100000),(2,200000),(3,300000),(4,400000),(5,500000);

Query OK, 5 rows affected (0.01 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> select\* from loan;

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

| lno | loan\_amt |

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

| 1 | 100000 |

| 2 | 200000 |

| 3 | 300000 |

| 4 | 400000 |

| 5 | 500000 |

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

5 rows in set (0.00 sec)

**Create Table Cust\_loan:**

mysql> create table cust\_loan(cno int references customer(cno),lno int references loan(lno),loan\_status varchar(20));

Query OK, 0 rows affected (0.05 sec)

mysql> desc cust\_loan;

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

| Field | Type | Null | Key | Default | Extra |

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

| cno | int | YES | | NULL | |

| lno | int | YES | | NULL | |

| loan\_status | varchar(20) | YES | | NULL | |

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

3 rows in set (0.00 sec)

mysql> insert into cust\_loan(cno,lno,loan\_status)values(101,1,'completed'),(102,2,'process'),

-> (103,3,'incompleted'),(104,4,'completed'),(105,5,'incomleted');

Query OK, 5 rows affected (0.01 sec)

Records: 5 Duplicates: 0 Warnings: 0

mysql> select\* from cust\_loan;

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

| cno | lno | loan\_status |

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

| 101 | 1 | completed |

| 102 | 2 | process |

| 103 | 3 | incompleted |

| 104 | 4 | completed |

| 105 | 5 | incomleted |

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

5 rows in set (0.00 sec)

**Q 1. Select the details of customer whose loan\_amt<200000;**

mysql> select cname,address,city

-> from customer,loan,cust\_loan

-> where customer.cno=cust\_loan.cno and loan.lno=cust\_loan.lno and loan\_amt<200000;

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

| cname | address | city |

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

| komal | satara | pune |

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

1 row in set (0.00 sec)

**Q 2. List all Customers whose name starts with s%.**

mysql> select\*

-> from customer,cust\_loan

-> where customer.cno=cust\_loan.cno and cname like's%';

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

| cno | cname | address | city | cno | lno | loan\_status |

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

| 103 | shivani | dahiwadi | wai | 103 | 3 | incompleted |

| 105 | soham | varud | Solapur | 105 | 5 | incomleted |

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

2 rows in set (0.00 sec)