DBMS Lab - 2

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5th Semester - B Section - Batch - 3

Company Database

Describe all the tables previously created in the database.

```
mysql> desc employee;
           Type
  Field
                           Null |
                                  Key
                                         Default
                                                   Extra
  fname
            varchar(20)
                           NO
                                         NULL
            varchar(20)
  lname
                           NO
                                         NULL
            varchar(10)
                           NO
                                  PRI
                                         NULL
  ssn
  bdate
            date
                           YES
                                         NULL
  address
            varchar(50)
                           YES
                                         NULL
  gender
            varchar(2)
                           YES
                                         NULL
  salary
            int
                           YES
                                         30000
            varchar(10)
                           YES
                                  MUL
  sup_ssn
                                         NULL
            varchar(10)
                           YES
  dno
                                         NULL
9 rows in set (0.03 sec)
mysql> alter table department add mgr_start_date date;
Query OK, 0 rows affected (0.15 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> desc department;
  Field
                                                  Default |
                    Type
                                    Null | Key |
                                                            Extra
  dname
                    varchar(10)
                                    NO
                                                  NULL
  dno
                    varchar(10)
                                    NO
                                           PRI
                                                  NULL
                    varchar(10)
  mgr_ssn
                                    NO
                                           MUL
                                                  NULL
  mgr_start_date
                                    YES
                                                  NULL
4 rows in set (0.00 sec)
mysql> alter table department add dlocation varchar(20) not null;
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> desc department;
 Field
                                             | Default | Extra
                   Type
                                 Null | Key
                   varchar(10)
                                 NO
  dname
                                               NULL
                   varchar(10)
                                 NO
                                         PRI
                                               NULL
  dno
  mgr_ssn
                   varchar(10)
                                 NO
                                         MUL
                                               NULL
                                 YES
                                               NULL
  mgr_start_date
  dlocation
                   varchar(20)
                                 NO
                                               NULL
```

```
Field
                               | Null |
                                       Key | Default | Extra
                  Type
                                             NULL
  dname
                  varchar(10)
                                NO
                                       PRI
  dno
                  varchar(10)
                                NO
                                             NULL
                                             NULL
  mgr_ssn
                  varchar(10)
                                NO
                                       MUL
                                YES
                                             NULL
  mgr_start_date
                  date
  dlocation
                  varchar(20) | NO
                                             NULL
5 rows in set (0.00 sec)
mysql> desc project;
                          Null | Key | Default | Extra
 Field | Type
 pname
          varchar(20)
                                        NULL
                          NO
          varchar(10)
                          NO
                                  PRI
                                        NULL
 pno
 dno
          varchar(10)
                          YES
                                 MUL
                                        NULL
 pdate | date
                          YES
                                        NULL
4 rows in set (0.03 sec)
mysql> alter table project add ploc varchar(30);
```

adding entries into project table

mysql>

project a

project b

project c

project d

project e

mysql>

1

2

4

5

5 rows in set (0.00 sec)

Query OK, 0 rows affected (0.08 sec) Records: 0 Duplicates: 0 Warnings: 0

mysql> desc department;

```
mysql> insert into
    -> project (pname, pno, dno, pdate, ploc)
```

```
-> values
-> ('project a', 1, 3, '2021-11-21',
-> ('project b', 2, 10, '2011-09-19',
-> ('project c', 3, 13, '2021-11-11',
```

3

10

13

11

13

```
pdate
```

```
ploc
 Bangalore
 Trichy
 Mysore
 Mumbai
```

```
2021-11-21
2011-09-19
2021-11-11
2019-01-03
```

Mysore

-> ('project d', 4, 11, '2019-01-03', 'Mumbai'),
-> ('project e', 5, 13, '2018-04-01', 'Mysore'); Query OK, 5 rows affected (0.01 sec) Records: 5 Duplicates: 0 Warnings: 0 mysql> select * from project; pname pno | dno

2018-04-01

```
'Mysore'),
```

'Bangalore'),

'Trichy'),

Q. Insert values into table department.

```
mysql> desc department;
                                                   Default |
  Field
                     Type
                                     Null
                                            Kev
                                                               Extra
                     varchar(10)
                                                   NULL
                                     NO
  dname
                     varchar(10)
                                     NO
                                             PRI
                                                   NULL
  dno
                     varchar(10)
                                            MUL
                                                   NULL
                                     NO
  mgr_ssn
                                     YES
                                                   NULL
  mgr_start_date
                     date
  dlocation
                     varchar(20)
                                     NO
                                                   NULL
5 rows in set (0.0<u>0 sec</u>)
mysql>
```

Adding Abisheh to the Employee table

```
mysql> insert into employee values ('Abhishek', 'Kumar', '5', '2000-04-21', 'Kolkata', 'M', 45000, '5', '11');
Query OK, 1 row affected (0.01 sec)
mysql>
```

```
mysql> select * from employee;
  fname
                lname
                          ssn |
                                bdate
                                              address
                                                          gender
                                                                    salary | sup_ssn
                                                                                        dno
  Raghunathan
                                2000-10-28
                                              Bangalore
                                                                     50000
                                                                     45000
                                2001-11-17
                                              Chennai
                                                          М
                                                                                        13
  Kiran
                Dev
                                2001-01-11
                                              Mumbai
                                                                     50400
  Priya
                Kumar
  Dhruv
                Sharma
                          4
                                2000-06-12
                                              Delhi
                                                          М
                                                                      4000
                                                                                        10
                Kumar
  Abhishek
                                2000-04-21
                                              Kolkata
                                                          М
                                                                     45000
                                                                                        11
5 rows in set (0.00 sec)
```

mysql>

Q. Insert values into department table

```
mysql> insert into department values ('HR', '18', '4', '2020-11-19');
Query OK, 1 row affected (0.01 sec)
mysql> insert into department values ('Research', '3', '1', '2021-11-13');
Query OK, 1 row affected (0.01 sec)
mysql> insert into department values ('Accounts', '10', '4', '2819-10-12');
ERROR 1062 (23080): Duplicate entry '10' for key 'department.PRIMARY'
mysql> insert into department values ('Accounts', '13', '2', '2019-10-12');
Query OK, 1 row affected (0.01 sec)
mysql> insert into department values ('Development', '11', '5', '2019-10-12');
Query OK, 1 row affected (0.01 sec)
mysql>
```

Q 1. Retrieve every department details.

```
mysql> select * from department;
 dname
                dno
                       mgr_ssn
                                 mgr_start_date
 HR
                10
                                 2020-11-19
                       5
                                  2019-10-12
 Development
                 11
                       2
 Accounts
                13
                                 2019-10-12
 Research
                3
                                 2021-11-13
4 rows in set (0.01 sec)
mysql>
```

Q 2. Retrieve the details of the employee whose name is Abhishek.

```
mysql> select * from employee where fname = 'Abhishek';
 fname
            lname | ssn
                           bdate
                                        address
                                                  gender
                                                           salary |
                                                                    sup_ssn
                                                                              dno
 Abhishek | Kumar | 5
                           2000-04-21
                                        Kolkata |
                                                            45000
                                                                    5
                                                                              11
1 row in set (0.00 sec)
mysql>
```

Q 3. Retrieve name and address of all employees who work for research department.

Q 5. Select / retrieve the salary of every employee.

Q 6. Retrieve the unique salary values.

```
mysql> select distinct salary from employee;
+-----+
| salary |
+-----+
| 50000 |
| 45000 |
| 50400 |
| 4000 |
+-----+
4 rows in set (0.01 sec)
mysql>
```