ASD LAB 3

Question -1

① → CREATE DATABASE COLLEGE;

② → use college;
   → show tables;

③ → create table student (sid int, Sname varchar(25), sex char(1), dob date, dno int);

→ create table Department (dno int, dname varchar(25));

→ create table faculty (f-id int, fname varchar(25), designation varchar(25), salary float, dno int);

→ create table course (cid int, cname varchar(25), credits int, dno int);

→ create table Registu (sid int, cid int, sem int);

→ create table teaching (f_id int, cid int, sem int);

→ create table Hostel (hid int, hname varchar(25), seats int);

→ desc student;
→ desc department;
→ desc faculty;
→ desc course;
→ desc Teaching;
→ des Register;

→ alter table student add primary key (sid);

→ alter table department add primary key (dno);

→ alter table faculty add primary key (t-id);

→ alter table course add primary key (Cid);

→ alter table hostel add primary key (hid);

→ alter table register add foreign key (sid) reference student (sid) on delete cascade add foreign key (sid) reference course (cid) on delete cascade;

→ alter table register teaching add foreign key (t-id) references faculty (t-id) on delete cascade. foreign key (cid) reference course (cid) on delete cascade;

→ alter table faculty add foreign key (dno) reference department (dno) on delete cascade;

→ alter table student add unique (dob);

→ alter table faculty add unique (fname);

→ alter table student modify sname varchar (20) not null;

→ alter table department modify dname varchar (20) not null;

→ alter table faculty modify cname varchar (30) not null;

→ alter table hostel modify hname varchar (30) not null;

→ insert into student (sid, sname, sex, dob, dno) values
   > ('1, 'avani', 'f', 2000-12-01, 3),
   > (5, 'Vishnu', 'm', 1999-04-05, 5),
   > (4, 'deepika', 'f', 1998-09-13, 2),
   > (3, 'ju', 'M', 1998-09-03, 1),
   > (2, 'appu', 'm', 1999-07-07, 4);

→ insert into department (dno, dname) values.
   > (1, 'CSE'),
   > (2, 'EEE'),
   > (3, 'ECE');
   > (4, 'ME'),
   > (5, 'CE');

→ insert into faculty (f-id, fname, designation, salary, dno) values
   > (101, 'alekhi', 'asst prof', 50000, 1);
   > (102, 'ashi', 'asst prof', 50000, 2);
   > (103, 'jos', 'asst prof', 5000, 4),

7 (104, 'ravi', asst prof, 70000, 5),
7 (106, 'johny', asst prof, 80000, 3);

.

→ Select * from student ;
→ select * from department;
→ select * from faculty ;
→ select * from course ;
→ select * from hostel ;
→ select * from register ;

→ ~~select~~ .

→ alter table student add grade char (1);

→ delete from student where dno = (select dno
from department where dname = 'cse'),

→ select * from student;

→ select * ~~from~~ sname from student where
sex = 'm';

```
Enter password: *************
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 11
Server version: 8.0.20 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> CREATE DATABASE college;
Query OK, 1 row affected (0.02 sec)

mysql> use college;
Database changed
mysql> show tables;
Empty set (0.01 sec)

mysql> create table Student (sid int, sname varchar(25), sex char(1), dob date,dno int);
Query OK, 0 rows affected (0.05 sec)

mysql> create table Department (dno int, dname varchar(25));
Query OK, 0 rows affected (0.04 sec)

mysql> create table Faculty (F_id int, fname varchar(25), designation varchar(25), salary float,dno int );
Query OK, 0 rows affected (0.04 sec)

mysql> create table Course (cid int, cname varchar(25), credits int,dno int);
Query OK, 0 rows affected (0.06 sec)

mysql> create table Register (sid int ,cid int,sem int );
Query OK, 0 rows affected (0.05 sec)

mysql> create table Teaching (f_id int ,cid int,sem int);
Query OK, 0 rows affected (0.07 sec)

mysql>  create table Hostel(hid int,hname varchar(25),seats int);
Query OK, 0 rows affected (0.05 sec)

mysql> ^C
mysql> desc student;
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| sid   | int         | YES  |     | NULL    |       |
| sname | varchar(25) | YES  |     | NULL    |       |
| sex   | char(1)     | YES  |     | NULL    |       |
```

```
mysql> desc student;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| sid    | int         | YES  |     | NULL    |       |
| sname  | varchar(25) | YES  |     | NULL    |       |
| sex    | char(1)     | YES  |     | NULL    |       |
| dob    | date        | YES  |     | NULL    |       |
| dno    | int         | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
5 rows in set (0.01 sec)

mysql> desc department;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| dno    | int         | YES  |     | NULL    |       |
| dname  | varchar(25) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
2 rows in set (0.00 sec)

mysql> desc faculty;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| F_id        | int         | YES  |     | NULL    |       |
| fname       | varchar(25) | YES  |     | NULL    |       |
| designation | varchar(25) | YES  |     | NULL    |       |
| salary      | float       | YES  |     | NULL    |       |
| dno         | int         | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
5 rows in set (0.00 sec)

mysql> desc faculty;course;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| F_id        | int         | YES  |     | NULL    |       |
| fname       | varchar(25) | YES  |     | NULL    |       |
| designation | varchar(25) | YES  |     | NULL    |       |
| salary      | float       | YES  |     | NULL    |       |
| dno         | int         | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
5 rows in set (0.00 sec)

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'cou
rse' at line 1
mysql> desc course;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
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+-----------+-------------+------+-----+---------+-------+
| Field     | Type        | Null | Key | Default | Extra |
+-----------+-------------+------+-----+---------+-------+
| cid       | int         | YES  |     | NULL    |       |
| cname     | varchar(25) | YES  |     | NULL    |       |
| credits   | int         | YES  |     | NULL    |       |
| dno       | int         | YES  |     | NULL    |       |
+-----------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql>  desc Teaching;
+-------+------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+-------+------+------+-----+---------+-------+
| f_id  | int  | YES  |     | NULL    |       |
| cid   | int  | YES  |     | NULL    |       |
| sem   | int  | YES  |     | NULL    |       |
+-------+------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> desc Register;
+-------+------+------+-----+---------+-------+
| Field | Type | Null | Key | Default | Extra |
+-------+------+------+-----+---------+-------+
| sid   | int  | YES  |     | NULL    |       |
| cid   | int  | YES  |     | NULL    |       |
| sem   | int  | YES  |     | NULL    |       |
+-------+------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> alter table student add primary key(sid);
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql>  alter table department add primary key(dno);
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table faculty add primary key(f_id);
Query OK, 0 rows affected (0.07 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table course add primary key(cid);
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table hostel add primary key(hid);
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0
```

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mysql> alter table hostel add primary key(hid);
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table register add foreign key(sid) references student(sid)
    -> on delete cascade,
    ->  add foreign key(cid) references course(cid)
    -> on delete cascade;
Query OK, 0 rows affected (0.11 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table teaching add foreign key(f_id) references faculty(f_id)
    ->  on delete cascade,
    -> ^C
mysql> alter table teaching add foreign key(f_id) references faculty(f_id)
    ->  on delete cascade,
    -> add foreign key(cid) references course(cid)
    -> on delete cascade;
Query OK, 0 rows affected (0.11 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table faculty add foreign key(dno) references department(dno)on delete cascade;
Query OK, 0 rows affected (0.12 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql>  alter table student add unique(dob);
Query OK, 0 rows affected (0.04 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table faculty add unique(fname);
Query OK, 0 rows affected (0.02 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table student modify sname varchar(20) not null;
Query OK, 0 rows affected (0.11 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table department modify dname varchar(30) not null;
Query OK, 0 rows affected (0.18 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table faculty modify fname varchar(30) not null;
Query OK, 0 rows affected (0.09 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql>  alter table course modify cname varchar(30) not null;
Query OK, 0 rows affected (0.08 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table hostel modify hname varchar(30) not null;
```

```
Records: 0  Duplicates: 0  Warnings: 0

mysql> alter table hostel modify hname varchar(30) not null;
Query OK, 0 rows affected (0.07 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> insert into student (sid, sname, sex, dob,dno) values(1,'aavani','f','24-09-2000',3);
ERROR 1292 (22007): Incorrect date value: '24-09-2000' for column 'dob' at row 1
mysql> insert into student(sid, sname, sex, dob,dno) values(1,'aavani','f','2000-12-01',3),(5,'vishnu','m','1999-04-05',5),
    -> (4,'depika','f','1998-09-03',1),
    -> (3,'jis','m','1998-04-13',2),
    -> (2,'appu','m','1999-07-07',4);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> insert into Department (dno, dname) values
    -> (1,'CSE'),
    -> (2,'EEE'),
    -> (3,'ECE'),
    -> (4,'ME'),
    -> (5,'CE');
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> insert into Faculty (F_id, fname, designation, salary,dno) values
    -> (101,'abhi','asst prof',50000,1),
    -> (101,'ashi','asst prof',50000,2),
    -> ^C
mysql> insert into Faculty (F_id, fname, designation, salary,dno) values
    -> (101,'abhi','asst prof',50000,1),
    -> (102,'ashi','asst prof',50000,2),
    -> (103,'joh','asst prof',50000,4),
    -> (104,'ras','asst prof',70000,5),
    -> (106,'johnny','asst prof',80000,3);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> insert into Course (cid, cname, credits,dno) values
    -> (1001,'ambika',9,1),
    -> (1002,'ika',9,2);
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0

mysql> select student;
ERROR 1054 (42S22): Unknown column 'student' in 'field list'
mysql> select from student;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'fro
m student' at line 1
mysql> select *from student;
+-----+--------+------+------------+------+
```

```
+-----+--------+-----+------------+-----+
| sid | sname  | sex | dob        | dno |
+-----+--------+-----+------------+-----+
|   1 | aavani | f   | 2000-12-01 |   3 |
|   2 | appu   | m   | 1999-07-07 |   4 |
|   3 | jis    | m   | 1998-04-13 |   2 |
|   4 | depika | f   | 1998-09-03 |   1 |
|   5 | vishnu | m   | 1999-04-05 |   5 |
+-----+--------+-----+------------+-----+
5 rows in set (0.00 sec)

mysql> select *from  Department;
+-----+-------+
| dno | dname |
+-----+-------+
|   1 | CSE   |
|   2 | EEE   |
|   3 | ECE   |
|   4 | ME    |
|   5 | CE    |
+-----+-------+
5 rows in set (0.00 sec)

mysql> select *from  Faculty;
+------+--------+-------------+--------+-----+
| F_id | fname  | designation | salary | dno |
+------+--------+-------------+--------+-----+
|  101 | abhi   | asst prof   |  50000 |   1 |
|  102 | ashi   | asst prof   |  50000 |   2 |
|  103 | joh    | asst prof   |  50000 |   4 |
|  104 | ras    | asst prof   |  70000 |   5 |
|  106 | johnny | asst prof   |  80000 |   3 |
+------+--------+-------------+--------+-----+
5 rows in set (0.00 sec)

mysql> insert into Course (cid, cname, credits,dno) values
    -> (1003,'rajana'3),
    -> (1004,'toc'5)'
    '> ^C
mysql> insert into Course (cid, cname, credits,dno) values
    -> (1003,'toc'3),
    -> (1004,'tc'5),
    -> (1005,'dc'4);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '3),

(1004,'tc'5),
(1005,'dc'4)' at line 2
mysql> insert into Course (cid, cname, credits,dno) values
    -> (1005,'dc',4),
    -> (1004,'tc',5),
```

```
(1005,'dc'4)' at line 2
mysql> insert into Course (cid, cname, credits,dno) values
    -> (1005,'dc',4),
    -> (1004,'tc',5),
    -> (1003,'toc',3);
ERROR 1136 (21S01): Column count doesn't match value count at row 1
mysql> alter table student add grade char(1);
Query OK, 0 rows affected (0.05 sec)
Records: 0  Duplicates: 0  Warnings: 0

mysql> delete from student where dno=(select dno from department where dname='cse');
Query OK, 1 row affected (0.02 sec)

mysql> select *from student;
+-----+--------+------+------------+------+-------+
| sid | sname  | sex  | dob        | dno  | grade |
+-----+--------+------+------------+------+-------+
|   1 | aavani | f    | 2000-12-01 |    3 | NULL  |
|   2 | appu   | m    | 1999-07-07 |    4 | NULL  |
|   3 | jis    | m    | 1998-04-13 |    2 | NULL  |
|   5 | vishnu | m    | 1999-04-05 |    5 | NULL  |
+-----+--------+------+------------+------+-------+
4 rows in set (0.00 sec)

mysql> select * record;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'rec
ord' at line 1
mysql> select * from register;
Empty set (0.00 sec)

mysql> select *from student(sname) where student(sex)=m;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '(sn
ame) where student(sex)=m' at line 1
mysql> select *from student(sname) where sex=m;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near '(sn
ame) where sex=m' at line 1
mysql> select sname from student where sex='m';
+--------+
| sname  |
+--------+
| appu   |
| jis    |
| vishnu |
+--------+
3 rows in set (0.00 sec)

mysql> drop database college;
Query OK, 7 rows affected (0.28 sec)

mysql>
```