SQL ASSIGNMENT 2.

```
Q1.
mysql> use day1;
Database changed
mysql> create table member(
  -> member_id int,
  -> member_name varchar(30),
  -> member_address varchar(30),
  -> acc_open_date date,
  -> membership_type varchar(20),
  -> fees_paid int,
  -> max_books_allowed int,
  -> penalty_amount decimal(7,2));
Query OK, 0 rows affected (0.09 sec)
mysql> create table books(
  -> book_no int,
  -> book_name varchar(30),
  -> author_name varchar(30),
  -> cost decimal(7,2),
  -> category char(10));
Query OK, 0 rows affected (0.07 sec)
mysql> create table issue(
  -> lib_issue_id int,
  -> book_no int,
  -> member_id int,
  -> issue_date date,
  -> return_date date);
Query OK, 0 rows affected (0.08 sec)
```

```
mysql> desc member;
+----+
| Field
     | Type | Null | Key | Default | Extra |
+----+
| member_id | int | YES | NULL | |
| member_name | varchar(30) | YES | NULL |
| acc_open_date | date | YES | NULL | |
| fees_paid | int | YES | NULL | |
| penalty_amount | decimal(7,2) | YES | NULL |
+----+
8 rows in set (0.01 sec)
mysql> desc books;
+----+
| Field | Type | Null | Key | Default | Extra |
+----+
| book_no | int | YES | NULL | |
| book_name | varchar(30) | YES | NULL |
| author_name | varchar(30) | YES | NULL |
| cost | decimal(7,2) | YES | NULL |
category | char(10) | YES | NULL |
+----+
5 rows in set (0.00 sec)
```

mysql> desc issue;

```
| Field
      | Type | Null | Key | Default | Extra |
+-----+
|book_no |int | YES | NULL |
| member_id | int | YES | NULL |
| issue_date | date | YES | NULL |
| return_date | date | YES | NULL |
+----+
5 rows in set (0.00 sec)
Q3.
mysql> create table member2 as(select * from member);
Query OK, 0 rows affected (0.09 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> show tables;
+----+
| Tables_in_day1 |
+----+
| books |
| countries |
| department |
issue
| job_histry |
| jobs
| member
| member2
| new_employee |
student
```

```
10 rows in set (0.00 sec)
mysql> drop table member2;
Query OK, 0 rows affected (0.05 sec)
mysql> show tables;
+----+
| Tables_in_day1 |
+----+
| books |
| countries |
| department |
issue
| job_histry |
| jobs
| member
| new_employee |
student |
+----+
9 rows in set (0.00 sec)
mysql>
Q4.
mysql> alter table member
  -> modify column member_id int primary key;
Query OK, 0 rows affected (0.15 sec)
```

Records: 0 Duplicates: 0 Warnings: 0

mysql> alter table member

- -> modify column membership_type varchar(100)
- -> check (membership_type in('lifetime','annual','half yearly','quar

terly'));

Query OK, 0 rows affected (0.15 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> desc member;
```

Q5.

mysql> alter table member

- -> modify column membership_type varchar(100)
- -> check (membership_type in('lifetime','annual','half yearly','quar
 terly'));

Query OK, 0 rows affected (0.15 sec)

Records: 0 Duplicates: 0 Warnings: 0

```
mysql> desc member;
| Field | Type | Null | Key | Default | Extra |
| member_name | varchar(30) | YES | NULL |
| member_address | varchar(30) | YES | NULL |
| acc_open_date | date | YES | NULL | |
| membership_type | varchar(100) | YES | NULL |
| fees_paid | int | YES | NULL | |
| penalty_amount | decimal(7,2) | YES | NULL |
+----+
8 rows in set (0.00 sec)
Q6.
mysql> alter table Issue
 -> add column Reference char(30);
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> desc issue;
+----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| lib_issue_id | int | YES | NULL | |
|book_no |int |YES | NULL |
| member_id | int | YES | NULL | |
| issue_date | date | YES | NULL |
| return_date | date | YES | NULL |
```

```
| Reference | char(30) | YES | NULL | |
+-----+
6 rows in set (0.00 sec)
Q7
mysql> alter table Issue
 -> drop column Reference;
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> desc Reference;
ERROR 1146 (42S02): Table 'day1.reference' doesn't exist
mysql> desc issue;
+----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| lib_issue_id | int | YES | NULL | |
|book_no |int | YES | NULL | |
| member_id | int | YES | NULL | |
| issue_date | date | YES | NULL | |
| return_date | date | YES | NULL | |
+----+
5 rows in set (0.00 sec)
Q8.
mysql> alter table Issue
 -> rename to lib_issue;
Query OK, 0 rows affected (0.06 sec)
mysql> show tables;
```

```
+----+
| Tables_in_day1 |
+----+
books
| countries |
| department |
| job_histry |
| jobs
| lib_issue
| member
| new_employee |
student
+----+
9 rows in set (0.00 sec)
Q9.
mysql> insert into Member(
member_id,member_name,member_address,acc_open_date,membership_type,fees_paid,max_boo
ks_allowed,penalty_amount)
  -> values(1,'Richa sharma',"pune","10-12-05","lifetime",25000,5,50);
Query OK, 1 row affected (0.04 sec)
mysql> insert into Member(
member_id,member_name,member_address,acc_open_date,membership_type,fees_paid,max_boo
ks_allowed,penalty_amount)
  -> values(2,"garima sen","pune",now(),"annual",1000,3,null);
Query OK, 1 row affected, 1 warning (0.04 sec)
```

mysql> select * from member;	
++	·-+
+++++	+
1 Richa sharma pune 2010-12-05 lifetime 25000 5 50.00	
2 garima sen pune 2024-12-20 annual 1000 3 NUL	
++++++	+
2 rows in set (0.03 sec)	
Q10.	
mysql> insert into member	
-> (member_id,member_name,member_address,acc_open_date,membership_type,fees_paid,max_koks_allowed,penalty_amount)	00
-> values(3,'amol pawar',"Sambhajinagar","2019-12-06","lifetime",40000,6,60),	
-> (4,'ankush pawar',"kannad","2016-04-03","lifetime",29500,8,40),	
-> (5,'ajay palhal',"kannad","2016-05-13","lifetime",30000,8,50),	
-> (6,"bhagwat mutthe","Sambhajinagar","2017-09-08","lifetime",25000,4,20),	
-> (7,'pravin kale',"pune","2019-10-11","lifetime",26000,7,null);	
mysql> select *from member;	
++	
member_id member_name member_address acc_open_date membership_type fees_paid max_books_allowed penalty_amount	
++++	

```
1 | Richa sharma | pune | 2010-12-05 | lifetime | 25000 | 5 |
50.00 |
    2 | garima sen | pune | 2024-12-20 | annual | 1000 |
                                                                3 |
                                                                       NULL
3 | amol pawar | Sambhajinagar | 2019-12-06 | lifetime | 40000 |
                                                                     6 |
60.00 |
    4 | ankush pawar | kannad | 2016-04-03 | lifetime | 29500 | 8 |
40.00
    5 | ajay palhal | kannad | 2016-05-13 | lifetime | 30000 |
50.00
    6 | bhagwat mutthe | Sambhajinagar | 2017-09-08 | lifetime | 25000 |
1
                                                                       4 |
20.00 |
    7 | pravin kale | pune | 2019-10-11 | lifetime | 26000 |
                                                                7 |
                                                                       NULL
7 rows in set (0.00 sec)
Q11.
mysql> alter table member
 -> modify column member_name char(20);
Query OK, 2 rows affected (0.09 sec)
Records: 2 Duplicates: 0 Warnings: 0
mysql> desc member;
| Field | Type | Null | Key | Default | Extra |
member id | int | NO | PRI | NULL | |
| member_address | varchar(30) | YES | | NULL | |
```

```
| acc_open_date | date | YES | NULL | |
| membership_type | varchar(100) | YES | | NULL | |
| fees_paid
           | penalty_amount | decimal(7,2) | YES | NULL | |
+-----+
8 rows in set (0.01 sec)
Q12.
mysql> insert into member(
member\_id, member\_name, member\_address, acc\_open\_date, membership\_type, fees\_paid, max\_boo
ks_allowed,penalty_amount)
 -> values(8,"trupti pawar","Sambhajinagar","2019-12-06","lifetime",2
3000,110,30);
Query OK, 1 row affected (0.03 sec)
Q13.
mysql> use day1;
Database changed
mysql> create table member101
 -> as(select *from member);
Query OK, 7 rows affected (0.11 sec)
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql> desc member101;
+----+
| Field | Type | Null | Key | Default | Extra |
| member_address | varchar(30) | YES | NULL |
| acc_open_date | date | YES | NULL | |
| membership_type | varchar(100) | YES | NULL |
| fees_paid | int | YES | NULL | |
| penalty_amount | decimal(7,2) | YES | NULL |
+-----+
8 rows in set (0.01 sec)
Q14.
mysql> alter table member101
 -> add constraint max_books_allowed
 -> check(max_books_allowed <100);</pre>
Query OK, 7 rows affected (0.16 sec)
Records: 7 Duplicates: 0 Warnings: 0
mysql> alter table member101
 -> add constraint penalty_amount
 -> check(max_books_allowed <1000);
Query OK, 7 rows affected (0.21 sec)
Records: 7 Duplicates: 0 Warnings: 0
```

```
mysql> drop table books;
Query OK, 0 rows affected (0.07 sec)
mysql> show tables;
+----+
| Tables_in_day1 |
+----+
| countries |
| department |
| job_histry |
| jobs
| lib_issue
| member
| member101
| new_employee |
student |
+----+
9 rows in set (0.01 sec)
q16.
mysql> create table books(
  -> book_no int primary key,
  -> book_name varchar(30) not null,
  -> category enum('system','fiction','database','rdbms','others'));
Query OK, 0 rows affected (0.09 sec)
mysql> desc books;
| Field | Type
                                      | Null | Key | Default | Extra |
```

```
| book_no | int
                                        | NO | PRI | NULL | |
| book_name | varchar(30)
                                                | NO | | NULL | |
| category | enum('system', 'fiction', 'database', 'rdbms', 'others') | YES | NULL |
3 rows in set (0.00 sec)
Q17.
mysql> alter table books
  -> add column author varchar(30)
  -> after book_name;
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> alter table books
  -> add column cost int
  -> after author;
Query OK, 0 rows affected (0.07 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> insert into books(
  -> book_no,book_name,author,cost,category)
  -> values(101,"let us c","denis ritchie",450,"system"),
  -> (102,"oracle-complete ref","loni",550,"database"),
  -> (103,"mastering sql","loni",250,"database"),
  -> (104,"pl sql-ref","scott urman",750,"database");
Query OK, 4 rows affected (0.04 sec)
Records: 4 Duplicates: 0 Warnings: 0
mysql> select *from books;
```

```
+----+
102 | oracle-complete ref | Ioni | 550 | database |
| 103 | mastering sql | loni | 250 | database |
| 104 | pl sql-ref | scott urman | 750 | database |
+-----+
4 rows in set (0.00 sec)
Q18.
mysql> insert into books(
 -> book_no,book_name,author,cost,category)
 -> values(105,"the alchemist","paulo coelho",299,"fiction");
Query OK, 1 row affected (0.04 sec)
Q19.
mysql> select *from books;
+-----+
+-----+
| 102 | oracle-complete ref | Ioni | 550 | database |
| 103 | mastering sql | loni | 250 | database |
| 104 | pl sql-ref | scott urman | 750 | database |
 105 | the alchemist | paulo coelho | 299 | fiction |
+-----+
5 rows in set (0.00 sec)
```

```
mysql> alter table books
 -> modify column category enum('system','fiction','database','rdbms','other','science');
Query OK, 5 rows affected (0.18 sec)
Records: 5 Duplicates: 0 Warnings: 0
mysql> insert into books(
 -> book_no,book_name,author,cost,category)
 -> values(106, "national geographic", "adis scott", 1000, "science");
Query OK, 1 row affected (0.01 sec)
mysql> select * from books;
+-----+
+-----+
| 102 | oracle-complete ref | loni | 550 | database |
| 103 | mastering sql | loni | 250 | database |
| 104 | pl sql-ref | scott urman | 750 | database |
| 105 | the alchemist | paulo coelho | 299 | fiction |
| 106 | national geographic | adis scott | 1000 | science |
+----+
6 rows in set (0.00 sec)
Q21.
mysql> rename table lib_issue to issue;
```

Query OK, 0 rows affected (0.09 sec)

```
mysql> show tables;
+----+
| Tables_in_day1 |
+----+
| books |
| countries |
| department |
issue |
| job_histry |
| jobs
| member
| member101
| new_employee |
student |
+----+
10 rows in set (0.04 sec)
Q22.
mysql> drop table issue;
Query OK, 0 rows affected (0.06 sec)
mysql> show tables;
+----+
| Tables_in_day1 |
+----+
books
| countries
| department |
| job_histry |
```

```
| jobs
| member
| member101
| new_employee |
student |
+----+
9 rows in set (0.00 sec)
Q23.
mysql> create table issue(
 -> lib_issue_id int primary key,
 -> book_no int,
 -> member_id int,
 -> issue_date date,
 -> return_date date,
 -> foreign key(book_no) references books(book_no),
 -> foreign key(member_id) references member(member_id));
Query OK, 0 rows affected (0.15 sec)
mysql> desc issue;
+----+
| Field | Type | Null | Key | Default | Extra |
+----+
| lib_issue_id | int | NO | PRI | NULL | |
| book_no | int | YES | MUL | NULL |
| member_id | int | YES | MUL | NULL |
| issue_date | date | YES | NULL | |
| return_date | date | YES | NULL |
+----+
5 rows in set (0.00 sec)
```

```
mysql> insert into issue(
 -> lib_issue_id,book_no,member_id,issue_date)
 -> values(7001,101,1,"2006-12-10");
Query OK, 1 row affected (0.04 sec)
mysql> insert into issue(
 -> lib_issue_id,book_no,member_id,issue_date)
 -> values(7002,102,2,'2006-12-25');
Query OK, 1 row affected (0.03 sec)
mysql> insert into issue(
 -> lib_issue_id,book_no,member_id,issue_date)
 -> values(7003,104,1,'2006-01-15'),
 -> (7004,101,1,'2006-07-04'),
 -> (7005,104,2,'2006-11-15'),
 -> (7006,101,3,'2006-02-18');
Query OK, 4 rows affected (0.03 sec)
Records: 4 Duplicates: 0 Warnings: 0
mysql> select * from issue;
+-----+
| lib_issue_id | book_no | member_id | issue_date | return_date |
+-----+
     7001 | 101 | 1 | 2006-12-10 | NULL
     7002 | 102 |
                      2 | 2006-12-25 | NULL
     7003 |
             104 |
                      1 | 2006-01-15 | NULL
                   1 | 2006-07-04 | NULL
     7004 |
             101 |
     7005 |
             104 |
                      2 | 2006-11-15 | NULL
                                             7006 |
             101 |
                      3 | 2006-02-18 | NULL
```

```
6 rows in set (0.00 sec)
Q25.
mysql> alter table issue
  -> drop foreign key issue_ibfk_2;
Query OK, 0 rows affected (0.05 sec)
Records: 0 Duplicates: 0 Warnings: 0
mysql> alter table issue
  -> drop foreign key issue_ibfk_1;
Query OK, 0 rows affected (0.04 sec)
Records: 0 Duplicates: 0 Warnings: 0
Q26.
mysql> use day1;
Database changed
mysql> insert into issue(
  -> lib_issue_id,book_no,member_id,issue_date)
  -> values(7008,107,8,"2006-12-09");
Query OK, 1 row affected (0.04 sec)
Q27.
alter table issue
  -> add FOREIGN key (book_no) REFERENCES books(book_no);
```

```
ERROR 1452 (23000): Cannot add or update a child row: a foreign key constraint fails ('day1'. '#sql-
1b0c 12', CONSTRAINT 'issue ibfk 1' FOREIGN KEY ('book no') REFERENCES 'books' ('book no'))
Q28.
mysql> delete from issue where member_id =8;
Query OK, 1 row affected (0.04 sec)
mysql> alter table issue
 -> add foreign key(book_no)
 -> REFERENCES books(book_no);
Query OK, 6 rows affected (0.22 sec)
Records: 6 Duplicates: 0 Warnings: 0
Q29.
mysql> delete from member where member_id =1;
ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails
('day1'.'issue', CONSTRAINT 'fk_member_id' FOREIGN KEY ('member_id') REFERENCES 'member'
(`member_id`))
Q30.
mysql> select * from books;
+-----+
 101 | let us c | denis ritchie | 450 | system |
  102 | oracle-complete ref | Ioni | 550 | database |
  103 | mastering sql | loni | 250 | database |
                 | scott urman | 750 | database |
  104 | pl sql-ref
  105 | the alchemist | paulo coelho | 299 | fiction |
```

```
| 106 | national geographic | adis scott | 1000 | science |
+-----+
6 rows in set (0.01 sec)
mysql> select * from member;
| member_id | member_name | member_address | acc_open_date | membership_type |
fees_paid | max_books_allowed | penalty_amount |
1 | Richa sharma | pune | 2010-12-05 | lifetime | 25000 |
                                                     5 |
50.00
   2 | garima sen | pune | 2024-12-20 | annual | 1000 |
                                                    3 |
                                                          NULL
   3 | amol pawar | Sambhajinagar | 2019-12-06 | lifetime | 40000 |
                                                        6 |
60.00 I
  4 | ankush pawar | kannad | 2016-04-03 | lifetime | 29500 |
                                                      8 |
40.00 |
   5 | ajay palhal | kannad | 2016-05-13 | lifetime | 30000 |
                                                     8 |
50.00 |
   6 | bhagwat mutthe | Sambhajinagar | 2017-09-08 | lifetime | 25000 |
                                                          4 |
20.00 |
   7 | pravin kale | pune | 2019-10-11 | lifetime | 26000 |
                                                    7 |
                                                          NULL
   8 | trupti pawar | Sambhajinagar | 2019-12-06 | lifetime | 23000 |
                                                       110 |
30.00 l
8 rows in set (0.00 sec)
mysql> select * from issue;
+-----+
| lib_issue_id | book_no | member_id | issue_date | return_date |
+-----+
```

```
7001 |
           101 |
                   1 | 2006-12-10 | NULL
    7002 |
           102 |
                   2 | 2006-12-25 | NULL
                                       Ι
    7003 |
           104 | 1 | 2006-01-15 | NULL
                                       1
    7004 |
           101 | 1 | 2006-07-04 | NULL
                                       Ι
    7005 |
           104 | 2 | 2006-11-15 | NULL
    7006 |
           101 |
                  3 | 2006-02-18 | NULL
                                       1
+----+
6 rows in set (0.00 sec)
Q31.
mysql> update issue set return_date='2006-07-19' where lib_issue_id=7004;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> update issue set return_date='2006-11-30' where lib_issue_id=7005;
Query OK, 1 row affected (0.04 sec)
Rows matched: 1 Changed: 1 Warnings: 0
mysql> select *from issue;
+----+
| lib_issue_id | book_no | member_id | issue_date | return_date |
+-----+
    7001 | 101 | 1 | 2006-12-10 | NULL |
    7002 | 102 | 2 | 2006-12-25 | NULL
    7003 | 104 | 1 | 2006-01-15 | NULL
    7004 | 101 | 1 | 2006-07-04 | 2006-07-19 |
    7005 | 104 | 2 | 2006-11-15 | 2006-11-30 |
    7006 | 101 | 3 | 2006-02-18 | NULL
+----+
```

```
Q32.
mysql> delete from issue where member_id=1 && issue_date<'2006-12-10';
Query OK, 2 rows affected, 1 warning (0.04 sec)
mysql> select *from issue;
+-----+
| lib_issue_id | book_no | member_id | issue_date | return_date |
+-----+
   7001 | 101 | 1 | 2006-12-10 | NULL |
   7002 | 102 | 2 | 2006-12-25 | NULL
   7005 | 104 | 2 | 2006-11-15 | 2006-11-30 |
    7006 | 101 | 3 | 2006-02-18 | NULL |
+-----+
4 rows in set (0.00 sec)
mysql> delete from issue where member_id=1 && issue_date<='2006-12-10';
Query OK, 1 row affected, 1 warning (0.04 sec)
mysql> select *from issue;
+-----+
| lib_issue_id | book_no | member_id | issue_date | return_date |
+-----+
   7002 | 102 | 2 | 2006-12-25 | NULL |
    7005 | 104 | 2 | 2006-11-15 | 2006-11-30 |
    7006 | 101 | 3 | 2006-02-18 | NULL |
+-----+
3 rows in set (0.00 sec)
```

6 rows in set (0.00 sec)

mysql> delete from books where category in('system', 'fiction', 'science');

ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails ('day1'.'issue', CONSTRAINT 'issue_ibfk_1' FOREIGN KEY ('book_no') REFERENCES 'books' ('book_no'))

Q34.

mysql> drop table member;

ERROR 3730 (HY000): Cannot drop table 'member' referenced by a foreign key constraint 'fk_member_id' on table 'issue'.

Q35.

mysql> drop table books;

ERROR 3730 (HY000): Cannot drop table 'books' referenced by a foreign key constraint 'issue_ibfk_1' on table 'issue'.