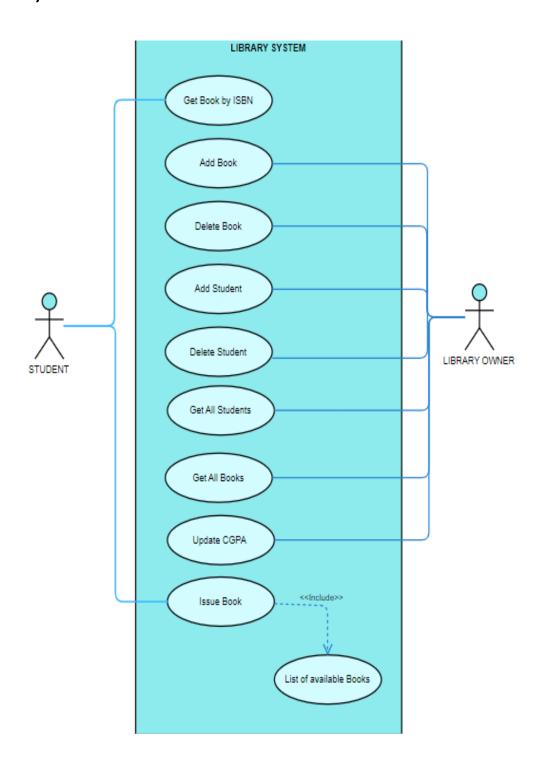
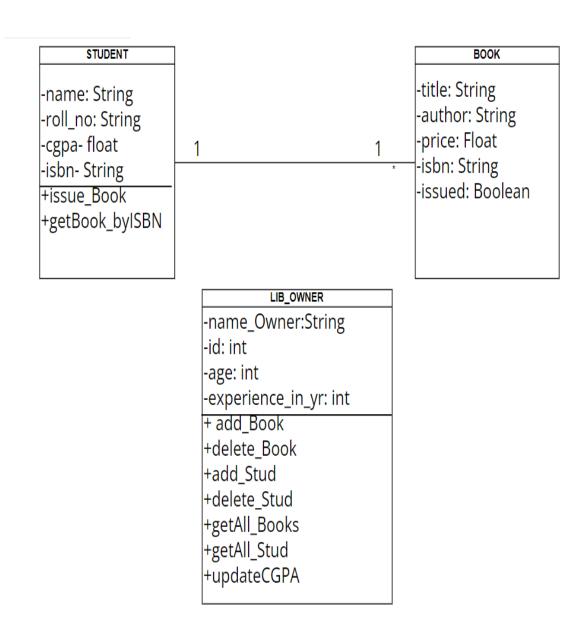
LIBRARY MANAGEMENT SYSTEM

-Tarun Kumar Gupta(IMT2020061)

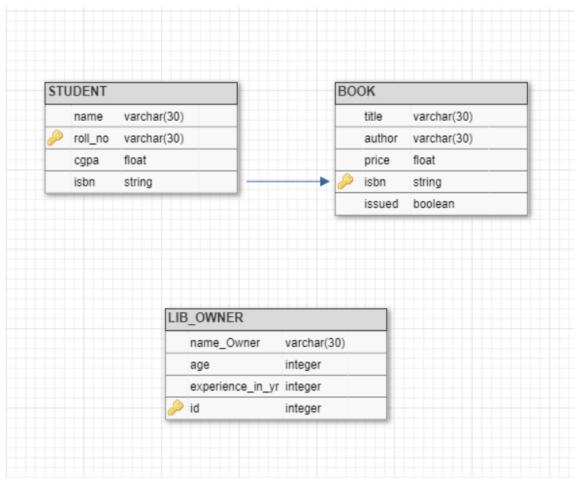
I) USE CASE DIAGRAM



II) UML Diagram

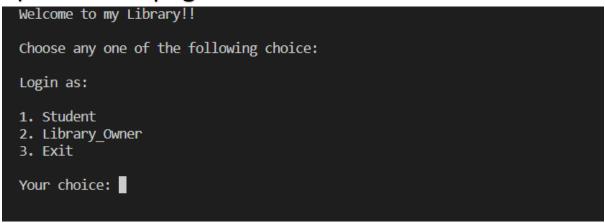


III) OR MAPPING



iv) Output Screenshots

1) Welcome page:



2) Student login page:

```
Welcome to my Library!!

Choose any one of the following choice:

Login as:

1. Student
2. Library_Owner
3. Exit

Your choice: 1

You are logged in as a student now

Choose any of the following choices:

1. Get book by ISBN
2. Issue book
3. Exit

Your choice:
```

3) Get book by ISBN:

```
You are logged in as a student now

Choose any of the following choices:

1. Get book by ISBN
2. Issue book
3. Exit

Your choice: 1

Enter ISBN of the book: 1
Title: Blockchain, Auth: Raza, Price: 1000.0, Isbn: 1

Enter your next choice:
```

4) Issue book:

```
You are logged in as a student now

Choose any of the following choices:

1. Get book by ISBN
2. Issue book
3. Exit

Your choice: 2
Enter your Roll Number: 001

List of available books that you can issue:

Title: Blockchain, Auth: Raza, Price: 1000.0, Isbn: 1

Enter ISBN of the book that you want to issue: 1
Book has been issued

Enter your next choice:
```

5) Owner login page:

```
Welcome to my Library!!
Choose any one of the following choice:
Login as:

    Student

2. Library Owner
3. Exit
Your choice: 2
You are logged in as a Library Owner now
Choose any of the following choices:
1. Add book
2. Delete book
3. Add Student
4. Delete Student
5. Get all Students
6. Get all Books
7. Update cgpa of a student
8. Exit
Your choice:
```

6) Add book:

```
You are logged in as a Library Owner now
Choose any of the following choices:
1. Add book
2. Delete book
3. Add Student
4. Delete Student
5. Get all Students
6. Get all Books
7. Update cgpa of a student
8. Exit
Your choice: 1
Enter Title of the book: Blockchain
Enter Author of the book: Raza
Enter price of the book: 1000
Enter isbn of the book: 1
Book has been added
```

7) Delete book:

```
You are logged in as a Library Owner now
Choose any of the following choices:

1. Add book
2. Delete book
3. Add Student
4. Delete Student
5. Get all Students
6. Get all Books
7. Update cgpa of a student
8. Exit
Your choice: 2
Enter isbn of the book: 1
Book has been deleted
Your next choice:
```

8) Add Student:

```
Choose any of the following choices:
1. Add book
2. Delete book
3. Add Student
4. Delete Student
5. Get all Students
6. Get all Books
7. Update cgpa of a student
8. Exit
Your choice: 6
Title: Blockchain, Author: Raza, Price: 1000.0, Isbn: 1
Your next choice: 3
Enter Name of the student: Rahul
Enter Roll Number of the student: 001
Enter cgpa of the student: 3
Your next choice:
```

9) Delete Student:

```
You are logged in as a Library Owner now
Choose any of the following choices:

1. Add book
2. Delete book
3. Add Student
4. Delete Student
5. Get all Students
6. Get all Books
7. Update cgpa of a student
8. Exit
Your choice: 4
Enter RollNo of the Student: 001
Student has been deleted
Your next choice:
```

10) Get all Students:

```
You are logged in as a Library Owner now
Choose any of the following choices:

1. Add book
2. Delete book
3. Add Student
4. Delete Student
5. Get all Students
6. Get all Books
7. Update cgpa of a student
8. Exit
Your choice: 5
Name: Rahul, Roll Number: 001, Cgpa: 3.0, ISBN: 1
Your next choice:
```

11) Get all Books:

```
Choose any of the following choices:

1. Add book

2. Delete book

3. Add Student

4. Delete Student

5. Get all Students

6. Get all Books

7. Update cgpa of a student

8. Exit

Your choice: 6
Title: Blockchain, Author: Raza, Price: 1000.0, Isbn: 1
```

12) Update CGPA of Student and showing the updated CGPA:

```
    Add book
    Delete book
    Add Student
    Delete Student
    Get all Students
    Get all Books
    Update cgpa of a student
    Exit
    Your choice: 7
        Enter Roll Number of the student: 001
        Enter new CGPA of the student: 4
        CGPA updated
        Your next choice: 5
        Name: Rahul, Roll Number: 001, Cgpa: 4.0, ISBN: 1
        Your next choice: ■
```

IV) Notes and Instructions to run the code:

- In your mysql command prompt run these commands:
 - i) source creatLib.sql
 - ii) source alterLib.sql
 - iii) source addData.sql
- 2. Come out of your mysql command prompt.
- 3. Run the command export CLASSPATH='\$path' where \$path is the path of mysql-connector-java-8.0.18.jar

file in your system. For eg. export CLASSPATH='/home/iiitb/Desktop/session 10/mysql-connector-java-8.0.18.jar:.'

- 4. In IMT2020061_MainMenu.java change the username and password to your credentials of mysql command prompt.
- 5. Then run javac IMT2020061_MainMenu.java
- 6. Then run java IMT2020061_MainMenu

NOTES: In mysql command prompt, you can run source dropLib.sql to delete the database.