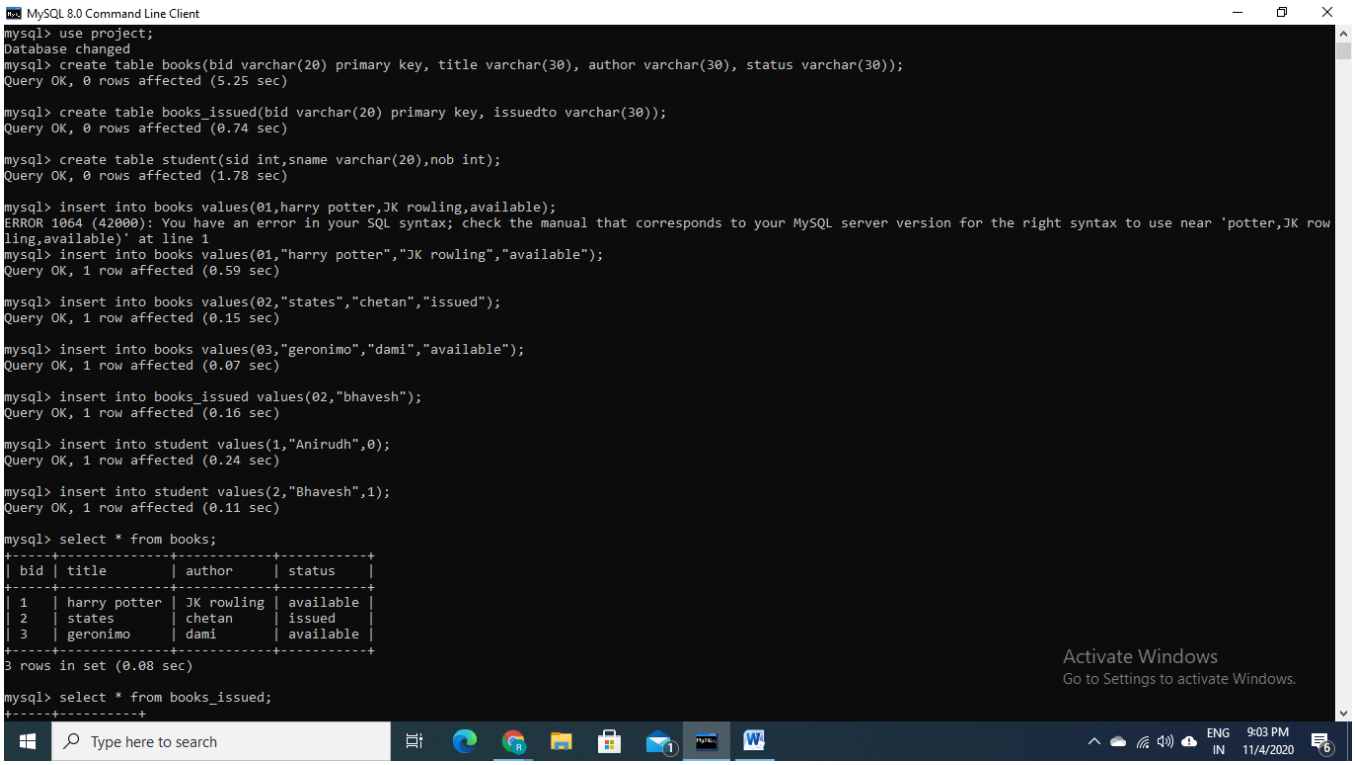
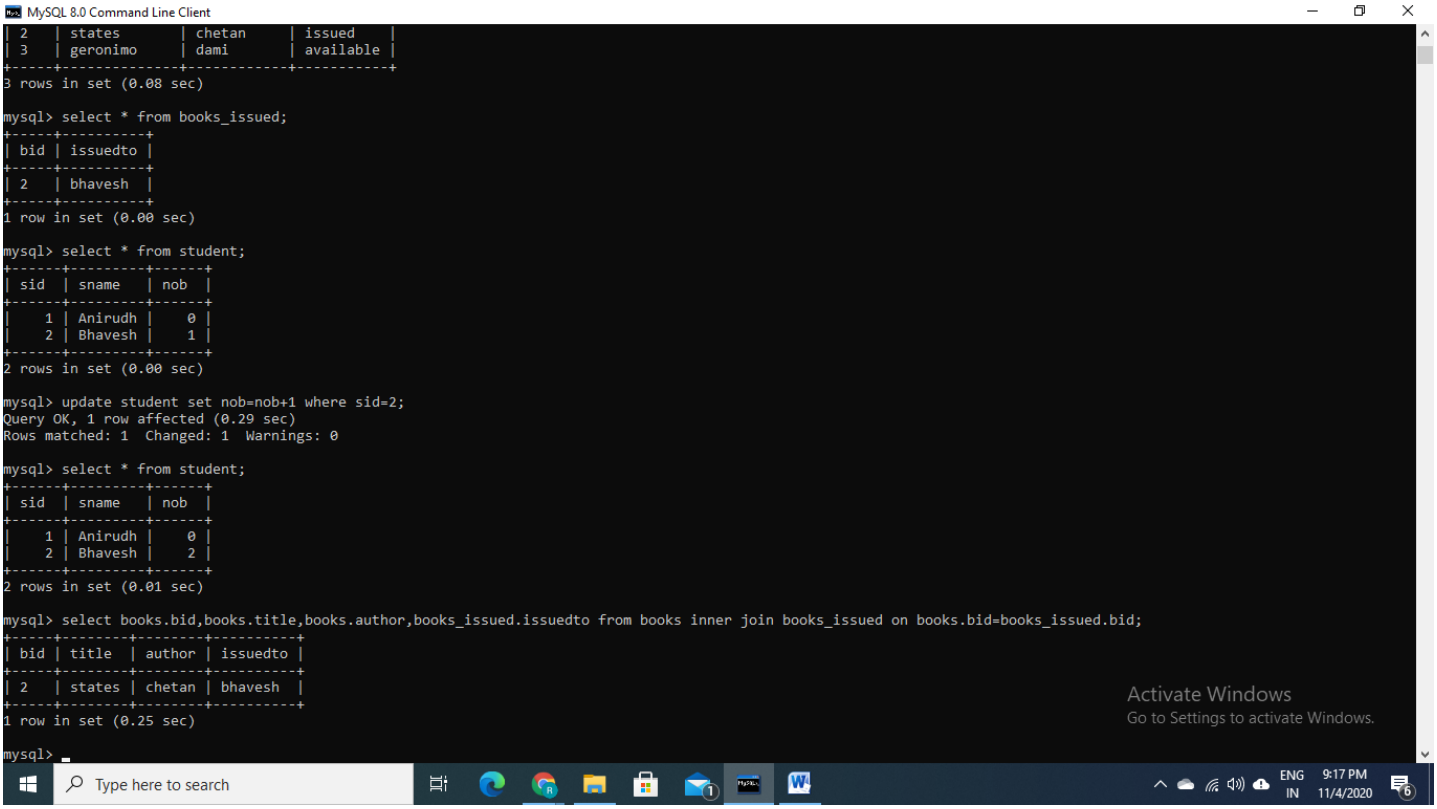
SQL QUERIES USED :

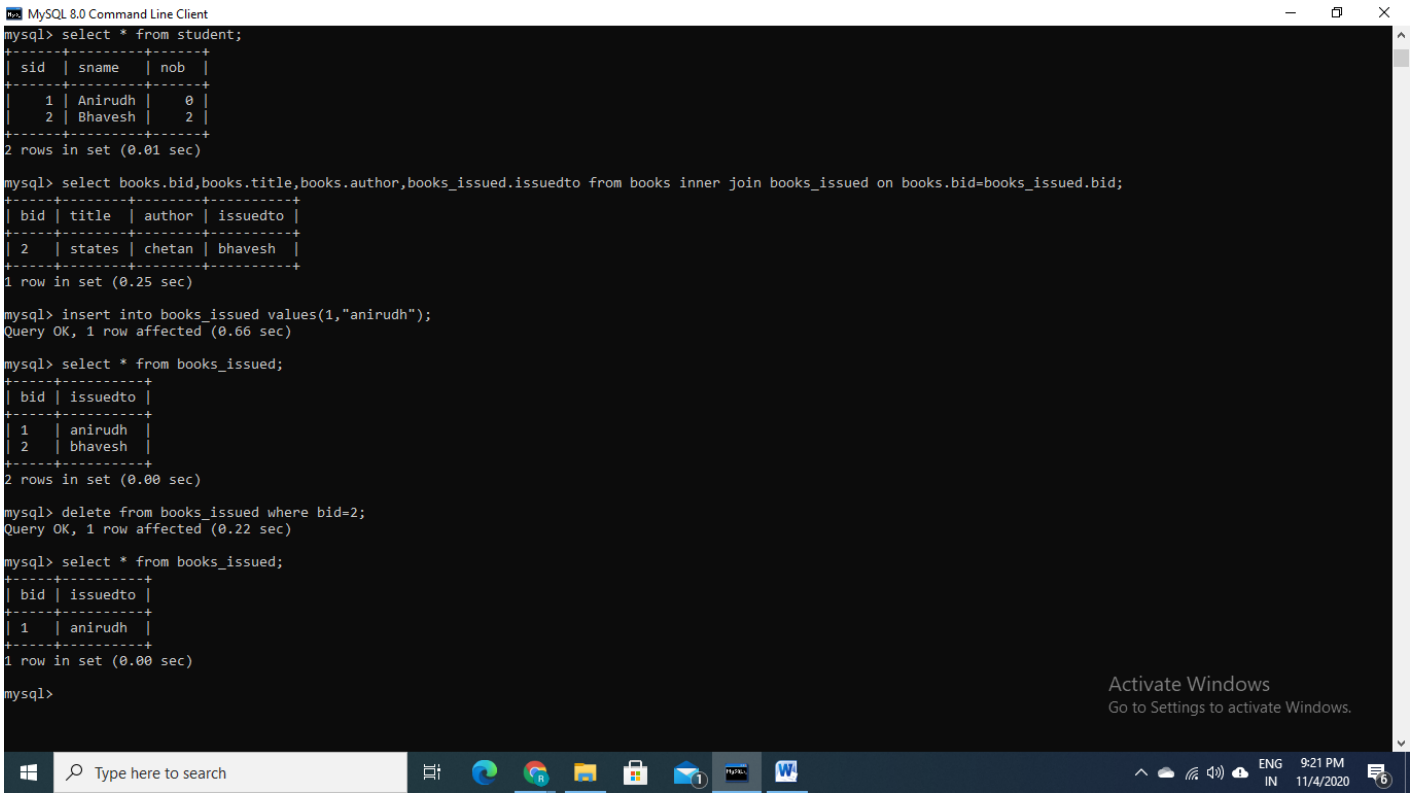
(CREATE, INSERT, SELECT, UPDATE, DELETE, JOIN)



```
MySQL 8.0 Command Line Client
mysql> use project;
Database changed
mysql> create table books(bid varchar(20) primary key, title varchar(30), author varchar(30), status varchar(30));
Query OK, 0 rows affected (5.25 sec)

mysql> create table books_issued(bid varchar(20) primary key, issuedto varchar(30));
Query OK, 0 rows affected (0.74 sec)

mysql> create table student(sid int,sname varchar(20),nob int);
Query OK, 0 rows affected (1.78 sec)

mysql> insert into books values(01,harry potter,JK rowling,available);
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 'potter,JK row
ling,available)' at line 1
mysql> insert into books values(01,"harry potter","JK rowling","available");
Query OK, 1 row affected (0.59 sec)

mysql> insert into books values(02,"states","chetan","issued");
Query OK, 1 row affected (0.15 sec)

mysql> insert into books values(03,"geronimo","dami","available");
Query OK, 1 row affected (0.07 sec)

mysql> insert into books_issued values(02,"bhavesh");
Query OK, 1 row affected (0.16 sec)

mysql> insert into student values(1,"Anirudh",0);
Query OK, 1 row affected (0.24 sec)

mysql> insert into student values(2,"Bhavesh",1);
Query OK, 1 row affected (0.11 sec)

mysql> select * from books;
+-----+--------------+------------+-----------+
| bid | title        | author     | status    |
+-----+--------------+------------+-----------+
| 1   | harry potter | JK rowling | available |
| 2   | states       | chetan     | issued    |
| 3   | geronimo     | dami       | available |
+-----+--------------+------------+-----------+
3 rows in set (0.08 sec)

mysql> select * from books_issued;
+-----+----------+
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG IN 9:03 PM 11/4/2020
```

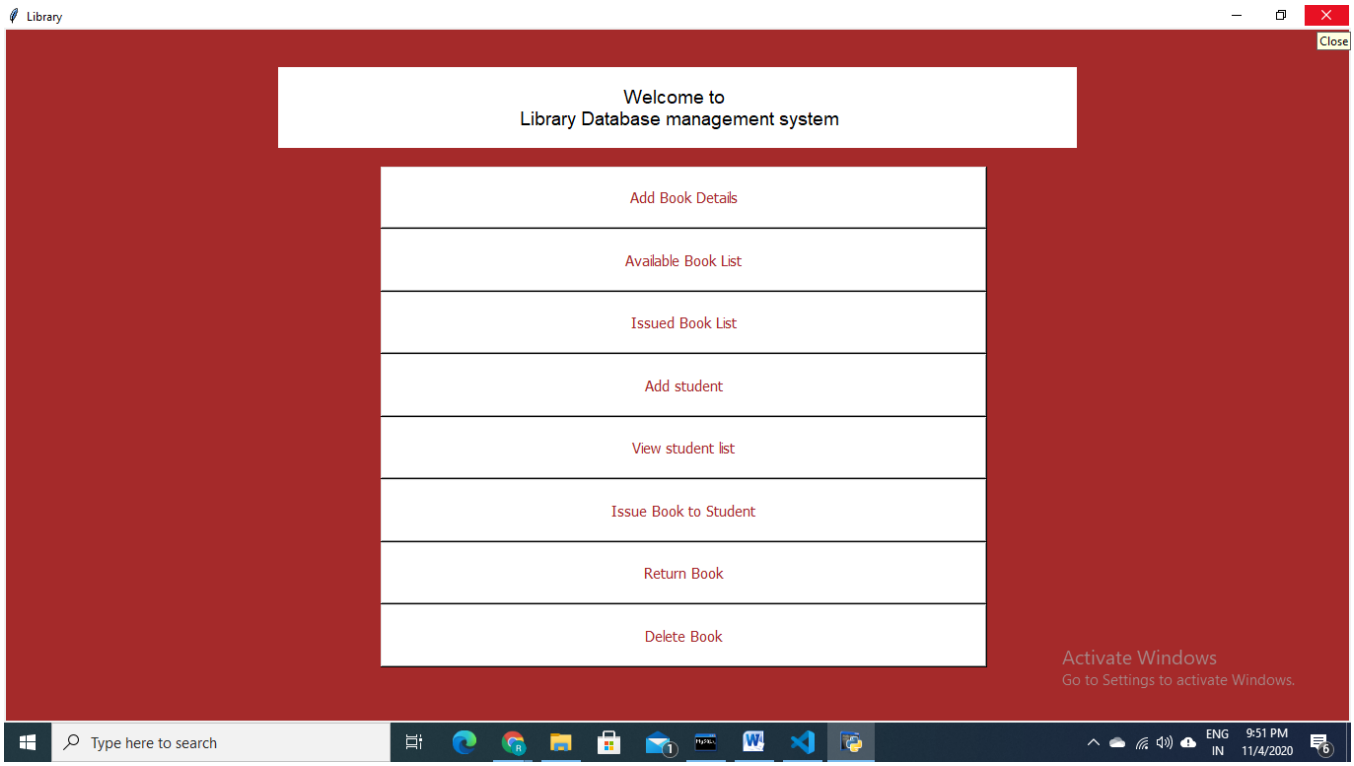


```
MySQL 8.0 Command Line Client
| 2   | states       | chetan     | issued    |
| 3   | geronimo     | dami       | available |
+-----+--------------+------------+-----------+
3 rows in set (0.08 sec)

mysql> select * from books_issued;
+-----+----------+
| bid | issuedto |
+-----+----------+
| 2   | bhavesh  |
+-----+----------+
1 row in set (0.00 sec)

mysql> select * from student;
+------+---------+------+
| sid  | sname   | nob  |
+------+---------+------+
|    1 | Anirudh |    0 |
|    2 | Bhavesh |    1 |
+------+---------+------+
2 rows in set (0.00 sec)

mysql> update student set nob=nob+1 where sid=2;
Query OK, 1 row affected (0.29 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from student;
+------+---------+------+
| sid  | sname   | nob  |
+------+---------+------+
|    1 | Anirudh |    0 |
|    2 | Bhavesh |    2 |
+------+---------+------+
2 rows in set (0.01 sec)

mysql> select books.bid,books.title,books.author,books_issued.issuedto from books inner join books_issued on books.bid=books_issued.bid;
+-----+--------+--------+----------+
| bid | title  | author | issuedto |
+-----+--------+--------+----------+
| 2   | states | chetan | bhavesh  |
+-----+--------+--------+----------+
1 row in set (0.25 sec)

mysql>
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG IN 9:17 PM 11/4/2020
```


MySQL 8.0 Command Line Client
mysql> select * from student;
+------+---------+------+
| sid | sname | nob |
+------+---------+------+
| 1 | Anirudh | 0 |
| 2 | Bhavesh | 2 |
+------+---------+------+
2 rows in set (0.01 sec)
mysql> select books.bid,books.title,books.author,books_issued.issuedto from books inner join books_issued on books.bid=books_issued.bid;
+-----+--------+--------+----------+
| bid | title | author | issuedto |
+-----+--------+--------+----------+
| 2 | states | chetan | bhavesh |
+-----+--------+--------+----------+
1 row in set (0.25 sec)
mysql> insert into books_issued values(1,"anirudh");
Query OK, 1 row affected (0.66 sec)
mysql> select * from books_issued;
+-----+----------+
| bid | issuedto |
+-----+----------+
| 1 | anirudh |
| 2 | bhavesh |
+-----+----------+
2 rows in set (0.00 sec)
mysql> delete from books_issued where bid=2;
Query OK, 1 row affected (0.22 sec)
mysql> select * from books_issued;
+-----+----------+
| bid | issuedto |
+-----+----------+
| 1 | anirudh |
+-----+----------+
1 row in set (0.00 sec)
mysql>
Activate Windows
Go to Settings to activate Windows.
Type here to search
ENG
IN
9:21 PM
11/4/2020

The Code

1. Main.py



1.1. Importing the Modules

```
from tkinter import *
from PIL import ImageTk,Image
import pymysql
from tkinter import messagebox
from AddBook import *
from DeleteBook import *
from availablebookslist import *
from IssueBook import *
from ReturnBook import *
from issuedbookslist import *
from viewstudents import *
from addstudent import *
```

1.2. Connecting to the MySql server

```
con = pymysql.connect(host="localhost",user="root",password="APr012016!",database
="project")
cur = con.cursor()
```

1.3. Designing the Window

```
root = Tk()
root.title("Library")
root.minsize(width=400,height=400)
root.geometry("600x700")
```

1.4. Setting up the Head Frame and giving background colour

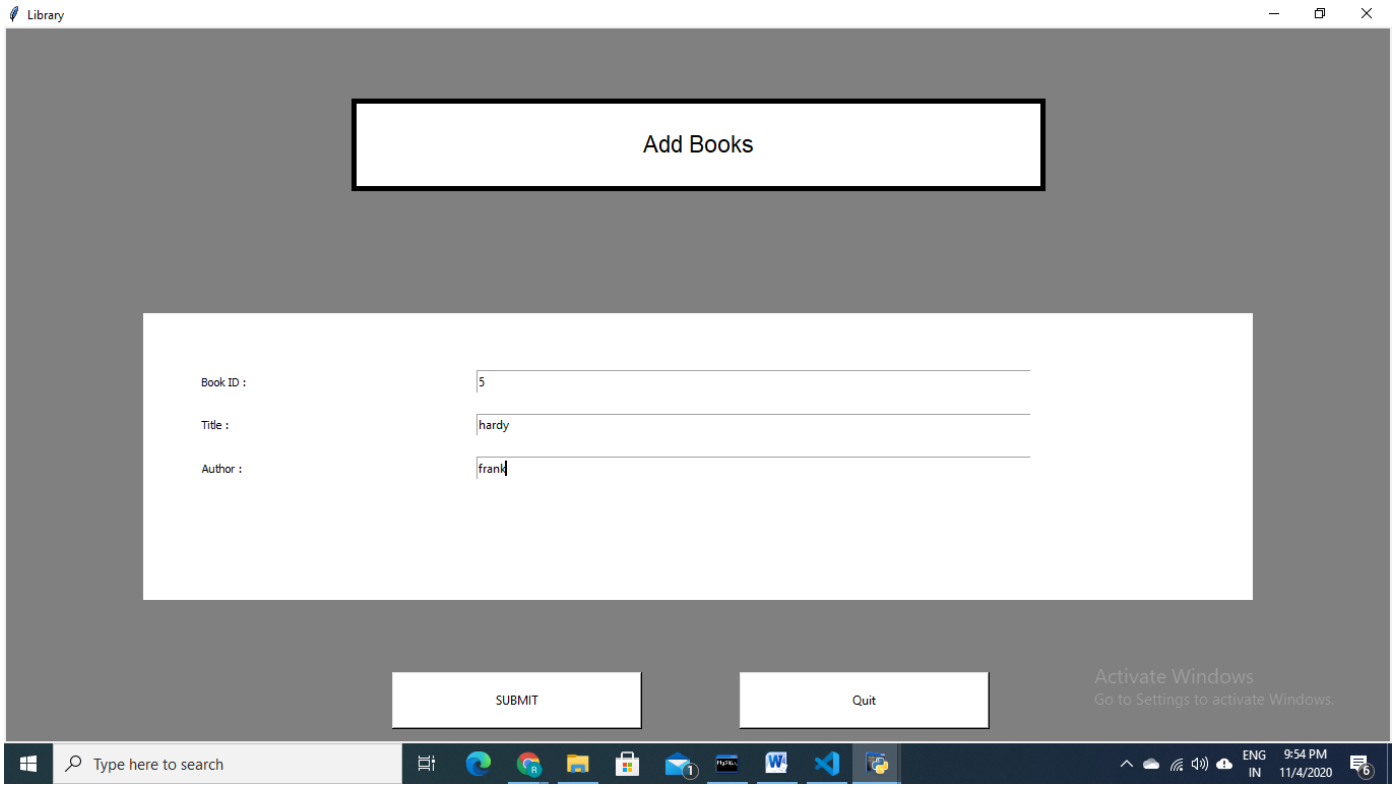
```
same=True
n=0.25

Canvas1 = Canvas(root)
Canvas1.config(bg="Brown")
Canvas1.pack(expand=True,fill=BOTH)

headingFrame1 = Frame(root,bg="brown",bd=5)
headingFrame1.place(relx=0.2,rely=0.05,relwidth=0.6,relheight=0.16)

headingLabel = Label(headingFrame1, text="Welcome to \n Library Database manageme
nt system", bg='white', fg='black', font=('Arial',14))
headingLabel.place(relx=0,rely=0, relwidth=1, relheight=0.8)
```

1.5. Adding the Buttons

```
btn1 = Button(root,text="Add Book Details",bg='white', fg='brown', font=('Tahoma'
,11), command=addBook)
btn1.place(relx=0.28,rely=0.2, relwidth=0.45,relheight=0.09)

btn2 = Button(root,text="Available Book List",bg='white', fg='brown',font=('Tahom
a',11) , command=View)
```

```
btn2.place(relx=0.28,rely=0.29, relwidth=0.45,relheight=0.09)

btn3 = Button(root,text="Issued Book List",bg='white', fg='brown',font=('Tahoma',
11) , command=iview)
btn3.place(relx=0.28,rely=0.38, relwidth=0.45,relheight=0.09)

btn4 = Button(root,text="Add student",bg='white', fg='brown', font=('Tahoma',11),
 command = addstudent)
btn4.place(relx=0.28,rely=0.47, relwidth=0.45,relheight=0.09)

btn5 = Button(root,text="View student list",bg='white', fg='brown', font=('Tahoma
',11), command = sview)
btn5.place(relx=0.28,rely=0.56, relwidth=0.45,relheight=0.09)

btn6 = Button(root,text="Issue Book to Student",bg='white', fg='brown',font=('Tah
oma',11) , command = issueBook)
btn6.place(relx=0.28,rely=0.65, relwidth=0.45,relheight=0.09)

btn7 = Button(root,text="Return Book",bg='white', fg='brown', font=('Tahoma',11),
 command = returnBook)
btn7.place(relx=0.28,rely=0.74, relwidth=0.45,relheight=0.09)

btn8 = Button(root,text="Delete Book",bg='white', fg='brown', font=('Tahoma',11),
 command=delete)
btn8.place(relx=0.28,rely=0.83, relwidth=0.45,relheight=0.09)

root.mainloop()
```

2. AddBook.py



2.1. Importing the necessary modules

```
from tkinter import *
from PIL import ImageTk,Image
from tkinter import messagebox
import pymysql
```

2.2. Function – bookRegister()

```
def bookRegister():

    bid = bookInfo1.get()
    title = bookInfo2.get()
```

```
    author = bookInfo3.get()

    insertBooks = "insert into "+bookTable+" values('"+bid+"','"+title+"','"+auth
or+"','available')"
    try:
        cur.execute(insertBooks)
        con.commit()
        messagebox.showinfo('Success',"Book added successfully")
    except:
        messagebox.showinfo("Error","Can't add data into Database")

    print(bid)
    print(title)
    print(author)
    print(status)


    root.destroy()
```

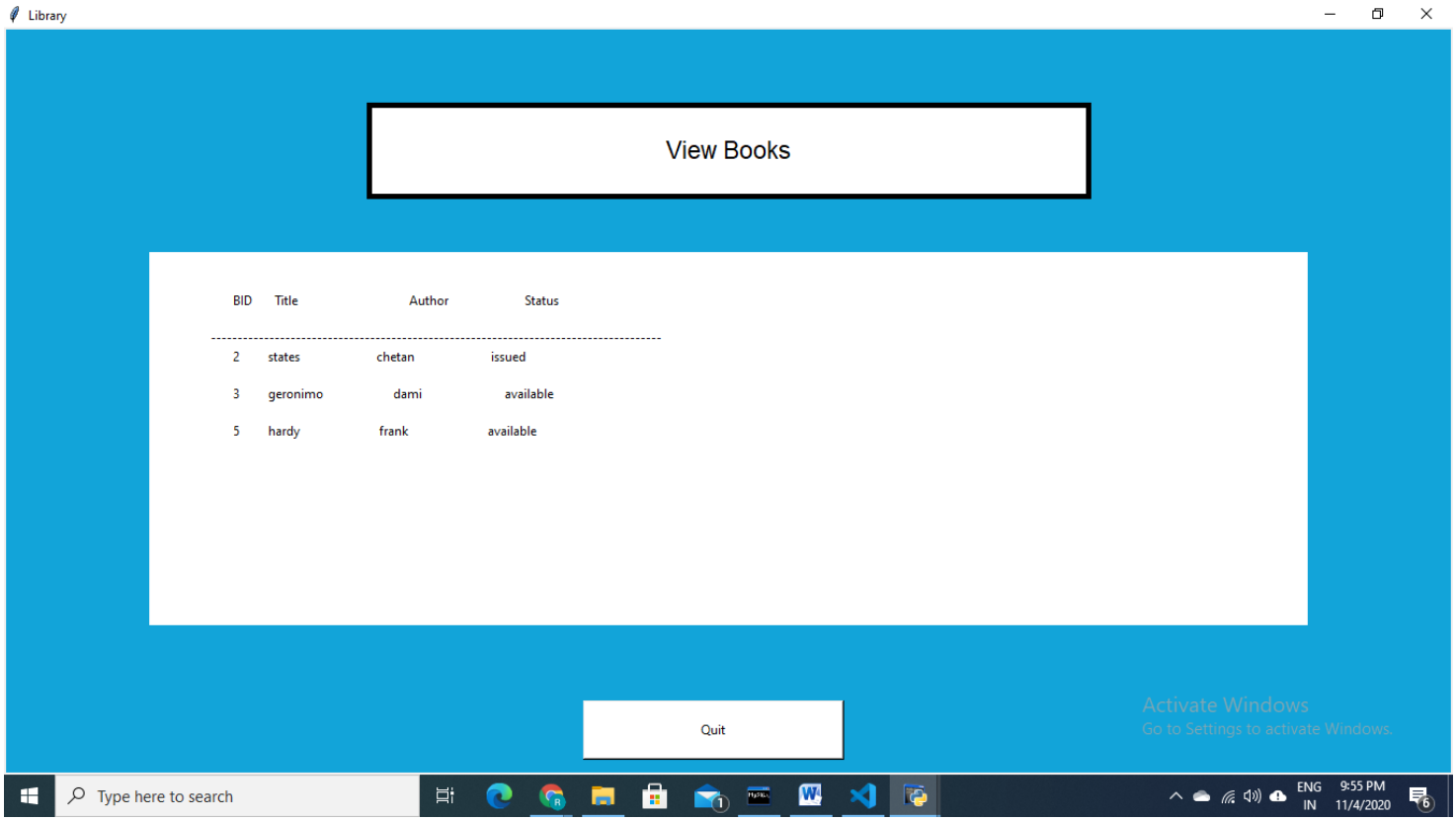
2.3. Function – addBook()

```
def addBook():

    global bookInfo1,bookInfo2,bookInfo3,bookInfo4,Canvas1,con,cur,bookTable,root

    root = Tk()
    root.title("Library")
    root.minsize(width=400,height=400)
    root.geometry("600x500")

    # Add your own database name and password here to reflect in the code
    mypass = "APr012016!"
    mydatabase="project"

    con = pymysql.connect(host="localhost",user="root",password="APr012016!",data
base="project")
    cur = con.cursor()

    # Enter Table Names here
    bookTable = "books" # Book Table

    Canvas1 = Canvas(root)
```

```
    Canvas1.config(bg="Grey")
    Canvas1.pack(expand=True,fill=BOTH)

    headingFrame1 = Frame(root,bg="Black",bd=5)
    headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

    headingLabel = Label(headingFrame1, text="Add Books", bg='White', fg='Black',
 font=('Arial',17))
    headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)


    labelFrame = Frame(root,bg='white')
    labelFrame.place(relx=0.1,rely=0.4,relwidth=0.8,relheight=0.4)

    # Book ID
    lb1 = Label(labelFrame,text="Book ID : ", bg='white', fg='black', font=('Taho
ma',8))
    lb1.place(relx=0.05,rely=0.2, relheight=0.08)

    bookInfo1 = Entry(labelFrame)
    bookInfo1.place(relx=0.3,rely=0.2, relwidth=0.50, relheight=0.08)

    # Title
    lb2 = Label(labelFrame,text="Title : ", bg='white', fg='black',font=('Tahoma'
,8))
    lb2.place(relx=0.05,rely=0.35, relheight=0.08)

    bookInfo2 = Entry(labelFrame)
    bookInfo2.place(relx=0.3,rely=0.35, relwidth=0.50, relheight=0.08)

    # Book Author
    lb3 = Label(labelFrame,text="Author : ", bg='white', fg='black',font=('Tahoma
',8))
    lb3.place(relx=0.05,rely=0.50, relheight=0.08)

    bookInfo3 = Entry(labelFrame)
    bookInfo3.place(relx=0.3,rely=0.50, relwidth=0.50, relheight=0.08)


    #Submit Button
    SubmitBtn = Button(root,text="SUBMIT",bg='white', fg='black',command=bookRegi
ster)
    SubmitBtn.place(relx=0.28,rely=0.9, relwidth=0.18,relheight=0.08)
```

```
    quitBtn = Button(root,text="Quit",bg='white', fg='black', command=root.destro
y)
    quitBtn.place(relx=0.53,rely=0.9, relwidth=0.18,relheight=0.08)
    root.mainloop()
```

3. Availablebookslist.py



3.1. Importing the necessary modules

```
from tkinter import *
from PIL import ImageTk,Image
from tkinter import messagebox
```

```
import pymysql
```

3.2. Connection to MySql server

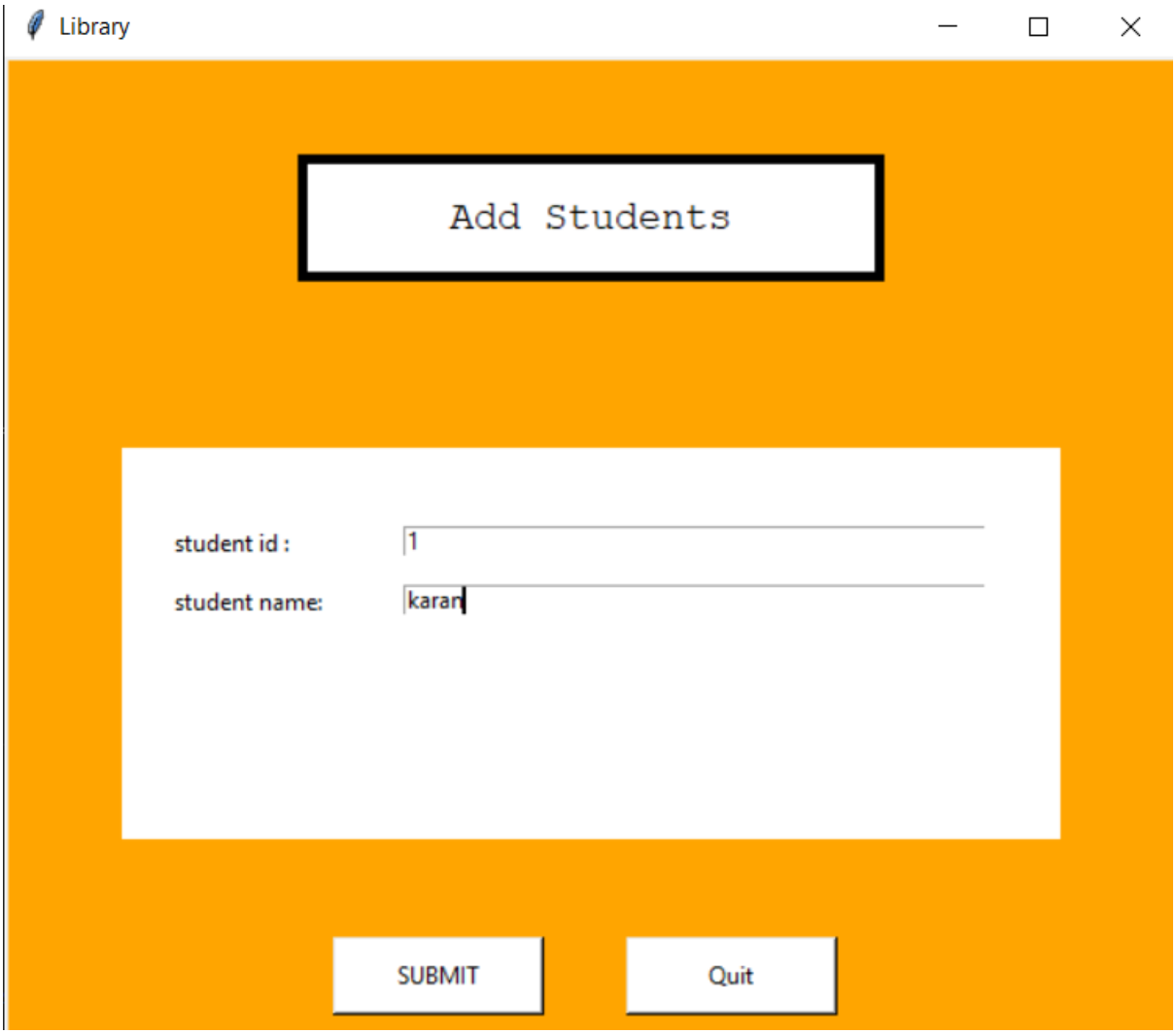
```
con = pymysql.connect(host="localhost",user="root",password="APr012016!",database
="project")
cur = con.cursor()

# Enter Table Names here
bookTable = "books"
```

3.3. Function – View()

```
def View():

    root = Tk()
    root.title("Library")
    root.minsize(width=400,height=400)
    root.geometry("600x500")


    Canvas1 = Canvas(root)
    Canvas1.config(bg="#12a4d9")
    Canvas1.pack(expand=True,fill=BOTH)


    headingFrame1 = Frame(root,bg="black",bd=5)
    headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

    headingLabel = Label(headingFrame1, text="View Books", bg='white', fg='black'
, font=('Arial',17))
    headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

    labelFrame = Frame(root,bg='white')
    labelFrame.place(relx=0.1,rely=0.3,relwidth=0.8,relheight=0.5)
    y = 0.25

    Label(labelFrame, text="%-10s%-40s%-30s%-
20s"%('BID','Title','Author','Status'),bg='white',fg='black').place(relx=0.07,rel
y=0.1)
```

```
    Label(labelFrame, text="----------------------------------------------------------
------------------------------
",bg='white',fg='black').place(relx=0.05,rely=0.2)
    getBooks = "select * from books where bid not in (select bid from books_issue
d)"
    try:
        cur.execute(getBooks)
        con.commit()
        for i in cur:
            Label(labelFrame, text="%-10s%-30s%-30s%-
20s"%(i[0],i[1],i[2],i[3]),bg='white',fg='black').place(relx=0.07,rely=y)
            y += 0.1
    except:
        messagebox.showinfo("Failed to fetch files from database")

    quitBtn = Button(root,text="Quit",bg='white', fg='black', command=root.destro
y)
    quitBtn.place(relx=0.4,rely=0.9, relwidth=0.18,relheight=0.08)

    root.mainloop()
```

4. Addstudent.py



4.1. Importing the necessary modules

```
from tkinter import *
from PIL import ImageTk,Image
from tkinter import messagebox
import pymysql
```

4.2 Function - studentRegister():

```
def studentRegister():
```

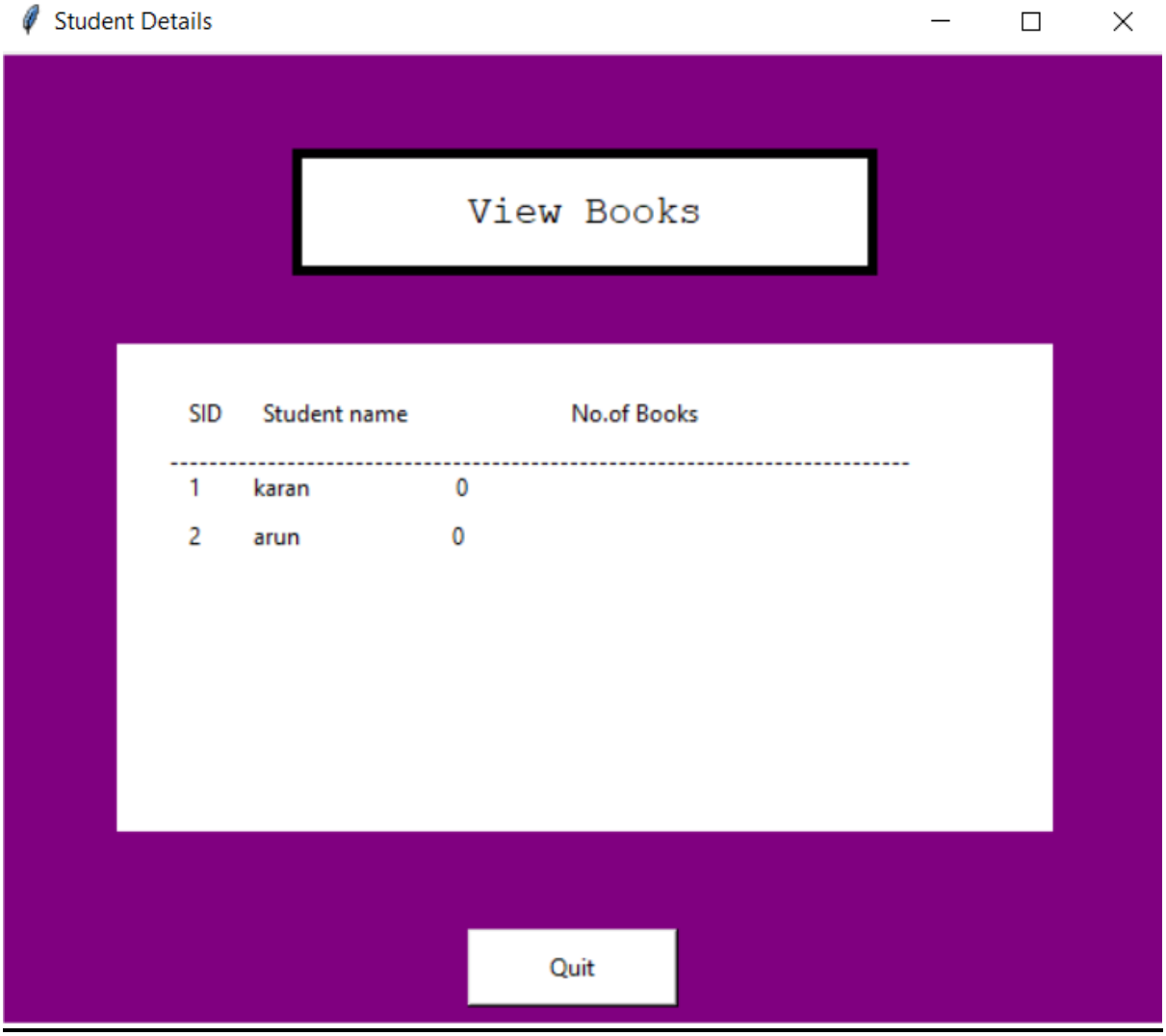
```
    sid = studInfo1.get()
    sname = studInfo2.get()
    sname = sname.lower()

    insertstudent = "insert into student values('"+sid+"','"+sname+"',0)"
    try:
        cur.execute(insertstudent)
        con.commit()
        messagebox.showinfo('Success',"student added successfully")
    except:
        messagebox.showinfo("Error","Can't add data into Database")

    print(sid)
    print(sname)



    root.destroy()
```

4.3 Function - addstudent():

```
def addstudent():

    global studInfo1,studInfo2,Canvas1,con,cur,studentTable,root

    root = Tk()
    root.title("Library")
    root.minsize(width=400,height=400)
    root.geometry("600x500")


    con = pymysql.connect(host="localhost",user="root",password="password",databa
se="db")
    cur = con.cursor()

    # Enter Table Names here
    studenttable = "student" # student Table

    Canvas1 = Canvas(root)

    Canvas1.config(bg="orange")
    Canvas1.pack(expand=True,fill=BOTH)
```

```
    headingFrame1 = Frame(root,bg="black",bd=5)
    headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

    headingLabel = Label(headingFrame1, text="Add Students", bg='white', fg='blac
k', font=('Courier',15))
    headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

    labelFrame = Frame(root,bg='white')
    labelFrame.place(relx=0.1,rely=0.4,relwidth=0.8,relheight=0.4)

    # Book ID
    lb1 = Label(labelFrame,text="student id : ", bg='white', fg='black')
    lb1.place(relx=0.05,rely=0.2, relheight=0.08)

    studInfo1 = Entry(labelFrame)
    studInfo1.place(relx=0.3,rely=0.2, relwidth=0.62, relheight=0.08)

    # Title
    lb2 = Label(labelFrame,text="student name: ", bg='white', fg='black')
    lb2.place(relx=0.05,rely=0.35, relheight=0.08)

    studInfo2 = Entry(labelFrame)
    studInfo2.place(relx=0.3,rely=0.35, relwidth=0.62, relheight=0.08)

    #Submit Button
    SubmitBtn = Button(root,text="SUBMIT",bg='white', fg='black',command=studentR
egister)
    SubmitBtn.place(relx=0.28,rely=0.9, relwidth=0.18,relheight=0.08)

    quitBtn = Button(root,text="Quit",bg='white', fg='black', command=root.destro
y)
    quitBtn.place(relx=0.53,rely=0.9, relwidth=0.18,relheight=0.08)

    root.mainloop()
```

5. Viewstudents.py



5.1. Importing the necessary modules

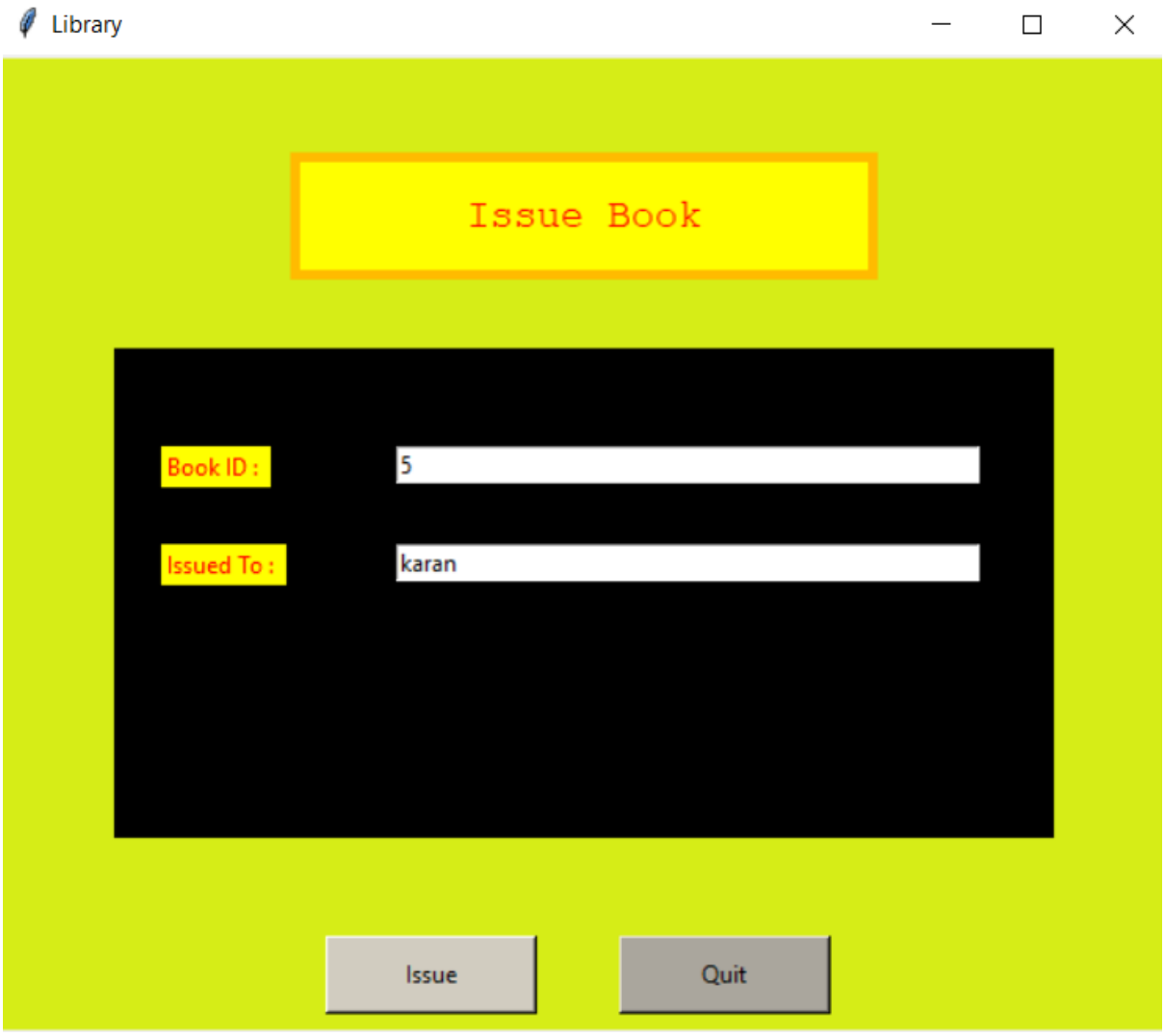
```
from tkinter import *
from PIL import ImageTk,Image
from tkinter import messagebox
import pymysql
```

5.2 Function - sview():

```
con = pymysql.connect(host="localhost",user="root",password="password",database="
db")
cur = con.cursor()

# Enter Table Names here
studenttable = "student"

def sview():

    root = Tk()
    root.title("Student Details")
    root.minsize(width=400,height=400)
    root.geometry("600x500")


    Canvas1 = Canvas(root)
    Canvas1.config(bg="Purple")
    Canvas1.pack(expand=True,fill=BOTH)


    headingFrame1 = Frame(root,bg="black",bd=5)
    headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

    headingLabel = Label(headingFrame1, text="View Books", bg='white', fg='black'
, font=('Courier',15))
    headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

    labelFrame = Frame(root,bg='white')
    labelFrame.place(relx=0.1,rely=0.3,relwidth=0.8,relheight=0.5)
    y = 0.25

    Label(labelFrame, text="%-10s%-40s%-
30s"%('SID','Student name','No.of Books'),bg='white',fg='black').place(relx=0.07,
rely=0.1)
    Label(labelFrame, text="----------------------------------------------------------
----------------------",bg='white',fg='black').place(relx=0.05,rely=0.2)
    getstudents = "select * from student"
    try:
        cur.execute(getstudents)
        con.commit()
        for i in cur:
            Label(labelFrame, text="%-10s%-30s%-
30s"%(i[0],i[1],i[2]),bg='white',fg='black').place(relx=0.07,rely=y)
```

```
            y += 0.1
    except:
        messagebox.showinfo("Failed to fetch files from database")

    quitBtn = Button(root,text="Quit",bg='white', fg='black', command=root.destro
y)
    quitBtn.place(relx=0.4,rely=0.9, relwidth=0.18,relheight=0.08)

    root.mainloop()
```

6. IssueBook.py



6.1. Importing the necessary modules

```
from tkinter import *
from PIL import ImageTk,Image
from tkinter import messagebox
import pymysql
```

6.2 Functional code which has the queries

```
mypass = "password"
mydatabase="db"

con = pymysql.connect(host="localhost",user="root",password=mypass,database=mydat
abase)
cur = con.cursor()

# Enter Table Names here
issueTable = "books_issued"
bookTable = "books"

#List To store all Book IDs
allBid = []
asname = []

def issue():

    global issueBtn,labelFrame,lb1,inf1,inf2,quitBtn,root,Canvas1,status

    bid = inf1.get()
    issueto = inf2.get()

    issueBtn.destroy()
    labelFrame.destroy()
    lb1.destroy()
    inf1.destroy()
    inf2.destroy()


    extractBid = "select bid from "+bookTable
    try:
        cur.execute(extractBid)
        con.commit()
        for i in cur:
            allBid.append(i[0])

        if bid in allBid:
            checkAvail = "select status from "+bookTable+" where bid = '"+bid+"'"
            cur.execute(checkAvail)
            con.commit()
            for i in cur:
                check = i[0]
```

```
            if check == 'available':
                status = True
            else:
                status = False

        else:
            messagebox.showinfo("Error","Book ID not present")
    except:
        messagebox.showinfo("Error","Can't fetch Book IDs")

    extractsname = "select sname from student"
    try:
        cur.execute(extractsname)
        con.commit()
        for j in cur:
            asname.append(j[0])
    except:
         messagebox.showinfo("Error","Can't fetch student name")


    issueSql = "insert into "+issueTable+" values ('"+bid+"','"+issueto+"')"
    show = "select * from "+issueTable

    updateStatus = "update "+bookTable+" set status = 'issued' where bid = '"+bid
+"'"
    updatestu = "update student set nob=nob+1 where sname = '"+issueto+"'"
    try:
        if bid in allBid and status == True and issueto in asname:
            cur.execute(issueSql)
            con.commit()
            cur.execute(updateStatus)
            con.commit()
            cur.execute(updatestu)
            con.commit()
            messagebox.showinfo('Success',"Book Issued Successfully")
            root.destroy()
        else:
            allBid.clear()
            messagebox.showinfo('Message',"error")
            root.destroy()
            return
    except:
        messagebox.showinfo("Search Error","The value entered is wrong, Try again
")
```

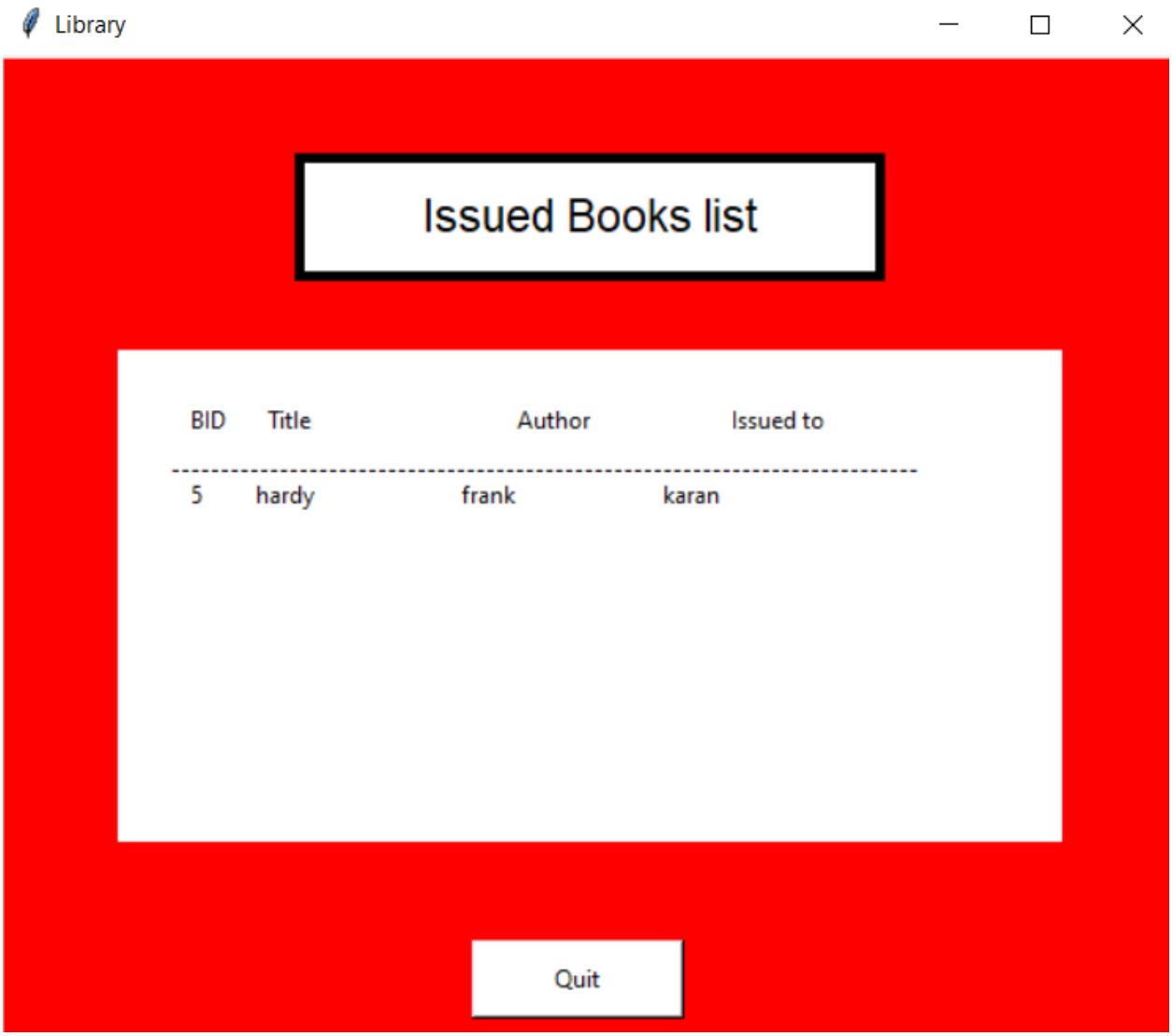
```
    print(bid)
    print(issueto)

    allBid.clear()
    asname.clear()
```

6.3 Function – issueBook():

```
def issueBook():

    global issueBtn,labelFrame,lb1,inf1,inf2,quitBtn,root,Canvas1,status

    root = Tk()
    root.title("Library")
    root.minsize(width=400,height=400)
    root.geometry("600x500")

    Canvas1 = Canvas(root)
    Canvas1.config(bg="#D6ED17")
    Canvas1.pack(expand=True,fill=BOTH)

    headingFrame1 = Frame(root,bg="#FFBB00",bd=5)
    headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

    headingLabel = Label(headingFrame1, text="Issue Book", bg='yellow', fg='red',
 font=('Courier',15))
    headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

    labelFrame = Frame(root,bg='black')
    labelFrame.place(relx=0.1,rely=0.3,relwidth=0.8,relheight=0.5)

    # Book ID
    lb1 = Label(labelFrame,text="Book ID : ", bg='yellow', fg='red')
    lb1.place(relx=0.05,rely=0.2)

    inf1 = Entry(labelFrame)
    inf1.place(relx=0.3,rely=0.2, relwidth=0.62)

    # Issued To Student name
    lb2 = Label(labelFrame,text="Issued To : ", bg='yellow', fg='red')
    lb2.place(relx=0.05,rely=0.4)

    inf2 = Entry(labelFrame)
```

```
    inf2.place(relx=0.3,rely=0.4, relwidth=0.62)


    #Issue Button
    issueBtn = Button(root,text="Issue",bg='#d1ccc0', fg='black',command=issue)
    issueBtn.place(relx=0.28,rely=0.9, relwidth=0.18,relheight=0.08)

    quitBtn = Button(root,text="Quit",bg='#aaa69d', fg='black', command=root.dest
roy)
    quitBtn.place(relx=0.53,rely=0.9, relwidth=0.18,relheight=0.08)

    root.mainloop()
```

7. Issuedbookslist.py



7.1. Importing the necessary modules

```
from tkinter import *
from PIL import ImageTk,Image
from tkinter import messagebox
import pymysql
```

7.2 Functional code which has the queries

```
con = pymysql.connect(host="localhost",user="root",password="password",database="
db")
```

```
cur = con.cursor()

# Enter Table Names here
bookTable = "books"

def iview():

    root = Tk()
    root.title("Library")
    root.minsize(width=400,height=400)
    root.geometry("600x500")


    Canvas1 = Canvas(root)
    Canvas1.config(bg="red")
    Canvas1.pack(expand=True,fill=BOTH)


    headingFrame1 = Frame(root,bg="black",bd=5)
    headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

    headingLabel = Label(headingFrame1, text="Issued Books list", bg='white', fg=
'black', font=('Arial',17))
    headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

    labelFrame = Frame(root,bg='white')
    labelFrame.place(relx=0.1,rely=0.3,relwidth=0.8,relheight=0.5)
    y = 0.25

    Label(labelFrame, text="%-10s%-40s%-30s%-
20s"%('BID','Title','Author','Issued to'),bg='white',fg='black').place(relx=0.07,
rely=0.1)
    Label(labelFrame, text="----------------------------------------------------
----------------------",bg='white',fg='black').place(relx=0.05,rely=0.2)
    getBooks = "select b.bid, b.title, b.author, a.issuedto from books b, books_i
ssued a where b.bid=a.bid"
    try:
        cur.execute(getBooks)
        con.commit()
        for i in cur:
            Label(labelFrame, text="%-10s%-30s%-30s%-
20s"%(i[0],i[1],i[2],i[3]),bg='white',fg='black').place(relx=0.07,rely=y)
            y += 0.1
    except:
        messagebox.showinfo("Failed to fetch files from database")
```

```
    quitBtn = Button(root,text="Quit",bg='white', fg='black', command=root.destro
y)
    quitBtn.place(relx=0.4,rely=0.9, relwidth=0.18,relheight=0.08)

    root.mainloop()
```

8. Returnbook.py

8.1. Importing the necessary modules

```
from tkinter import *
from PIL import ImageTk,Image
```

```
from tkinter import messagebox
import pymysql
```

8.2 Functional code which contains the queries

```
issueTable = "books_issued" #Issue Table
bookTable = "books" #Book Table


allBid = [] #List To store all Book IDs

def returnn():

    global SubmitBtn,labelFrame,lb1,bookInfo1,quitBtn,root,Canvas1,status

    bid = bookInfo1.get()

    extractBid = "select bid from "+issueTable
    try:
        cur.execute(extractBid)
        con.commit()
        for i in cur:
            allBid.append(i[0])

        if bid in allBid:
            checkAvail = "select status from "+bookTable+" where bid = '"+bid+"'"
            cur.execute(checkAvail)
            con.commit()
            for i in cur:
                check = i[0]

            if check == 'issued':
                status = True
            else:
                status = False

        else:
            messagebox.showinfo("Error","Book ID not present")
    except:
        messagebox.showinfo("Error","Can't fetch Book IDs")

    sn = "select issuedto from books_issued where bid = '"+bid+"'"
    cur.execute(sn)
```

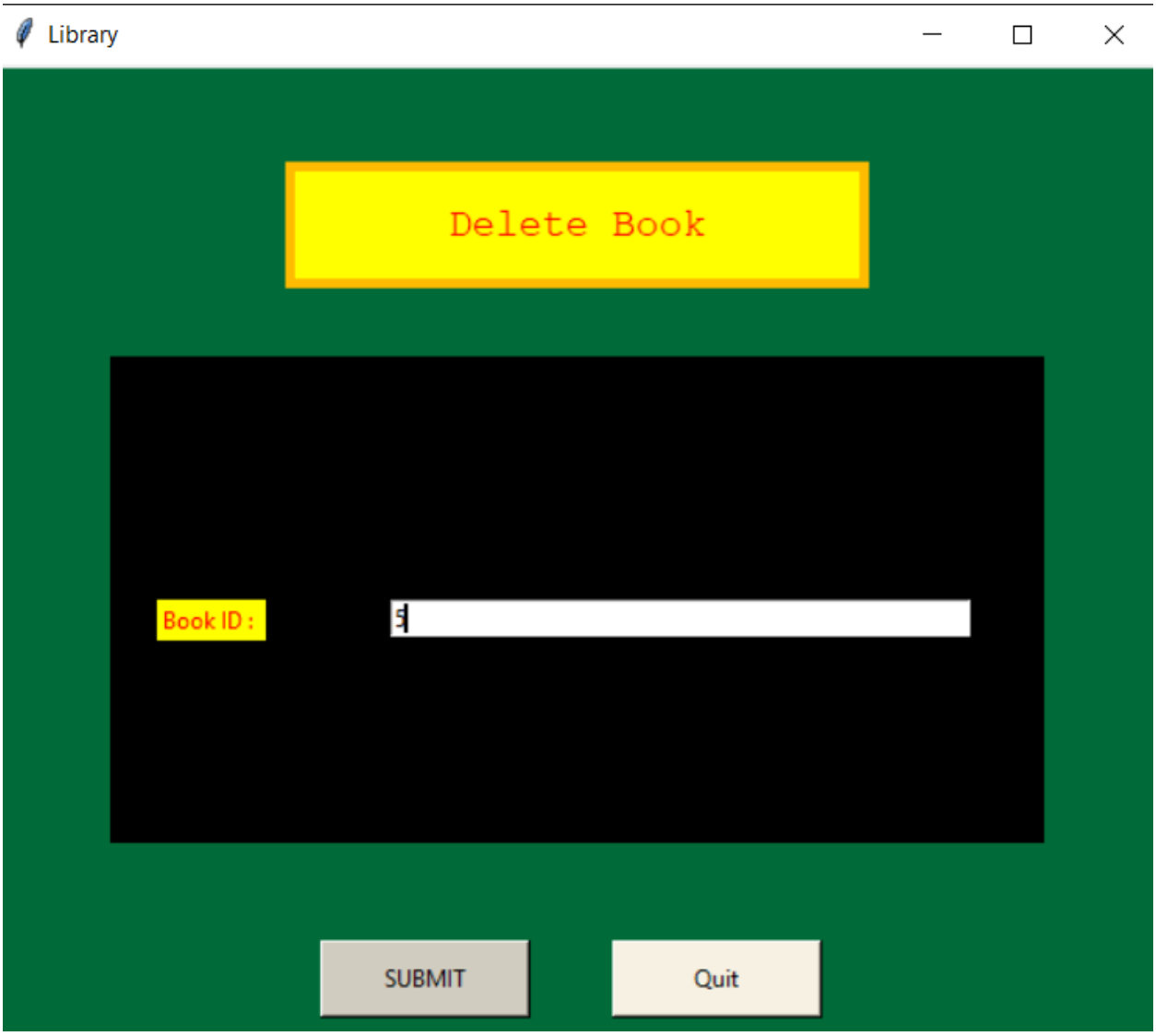
```
    con.commit()
    for i in cur:
      check = i[0]

    issueSql = "delete from books_issued where bid = '"+bid+"'"

    print(bid in allBid)
    print(status)
    updateStatus = "update "+bookTable+" set status = 'available' where bid = '"+
bid+"'"
    updatestud = "update student set nob=nob-1 where sname ='"+check+"'"
    try:
        if bid in allBid and status == True:
            cur.execute(updatestud)
            con.commit()
            cur.execute(issueSql)
            con.commit()
            cur.execute(updateStatus)
            con.commit()
            messagebox.showinfo('Success',"Book Returned Successfully")
        else:
            allBid.clear()
            sn.clear()
            messagebox.showinfo('Message',"Please check the book ID")
            root.destroy()
            return
    except:
        messagebox.showinfo("Search Error","The value entered is wrong, Try again
")


    allBid.clear()
    sn.clear()
    root.destroy()
```

8.3 Function – returnBook():

```
def returnBook():

    global bookInfo1,SubmitBtn,quitBtn,Canvas1,con,cur,root,labelFrame, lb1

    root = Tk()
    root.title("Library")
```

```
    root.minsize(width=400,height=400)
    root.geometry("600x500")


    Canvas1 = Canvas(root)

    Canvas1.config(bg="#006B38")
    Canvas1.pack(expand=True,fill=BOTH)

    headingFrame1 = Frame(root,bg="#FFBB00",bd=5)
    headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)

    headingLabel = Label(headingFrame1, text="Return Book", bg='yellow', fg='red'
, font=('Courier',15))
    headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

    labelFrame = Frame(root,bg='yellow')
    labelFrame.place(relx=0.1,rely=0.3,relwidth=0.8,relheight=0.5)

    # Book ID to Delete
    lb1 = Label(labelFrame,text="Book ID : ", bg='yellow', fg='red')
    lb1.place(relx=0.05,rely=0.5)

    bookInfo1 = Entry(labelFrame)
    bookInfo1.place(relx=0.3,rely=0.5, relwidth=0.62)

    #Submit Button
    SubmitBtn = Button(root,text="Return",bg='#d1ccc0', fg='black',command=return
n)
    SubmitBtn.place(relx=0.28,rely=0.9, relwidth=0.18,relheight=0.08)

    quitBtn = Button(root,text="Quit",bg='#f7f1e3', fg='black', command=root.dest
roy)
    quitBtn.place(relx=0.53,rely=0.9, relwidth=0.18,relheight=0.08)

    root.mainloop()
```

9. Deletebook.py



9.1. Importing the necessary modules

```
from tkinter import *
from PIL import ImageTk,Image
from tkinter import messagebox
import pymysql
```

9.2 Functional code which has the queries

```
issueTable = "books_issued"
```

```
bookTable = "books" #Book Table


def deleteBook():

    bid = bookInfo1.get()

    deleteSql = "delete from "+bookTable+" where bid = '"+bid+"'"
    deleteIssue = "delete from "+issueTable+" where bid = '"+bid+"'"
    try:
        cur.execute(deleteSql)
        con.commit()
        cur.execute(deleteIssue)
        con.commit()
        messagebox.showinfo('Success',"Book Record Deleted Successfully")
    except:
        messagebox.showinfo("Please check Book ID")


    print(bid)

    bookInfo1.delete(0, END)
    root.destroy()
```

9.3 Function – delete():

```
def delete():

    global bookInfo1,bookInfo2,bookInfo3,bookInfo4,Canvas1,con,cur,bookTable,root

    root = Tk()
    root.title("Library")
    root.minsize(width=400,height=400)
    root.geometry("600x500")


    Canvas1 = Canvas(root)

    Canvas1.config(bg="#006B38")
    Canvas1.pack(expand=True,fill=BOTH)

    headingFrame1 = Frame(root,bg="#FFBB00",bd=5)
    headingFrame1.place(relx=0.25,rely=0.1,relwidth=0.5,relheight=0.13)
```

```
    headingLabel = Label(headingFrame1, text="Delete Book", bg='yellow', fg='red'
, font=('Courier',15))
    headingLabel.place(relx=0,rely=0, relwidth=1, relheight=1)

    labelFrame = Frame(root,bg='black')
    labelFrame.place(relx=0.1,rely=0.3,relwidth=0.8,relheight=0.5)

    # Book ID to Delete
    lb2 = Label(labelFrame,text="Book ID : ", bg='yellow', fg='red')
    lb2.place(relx=0.05,rely=0.5)

    bookInfo1 = Entry(labelFrame)
    bookInfo1.place(relx=0.3,rely=0.5, relwidth=0.62)

    #Submit Button
    SubmitBtn = Button(root,text="SUBMIT",bg='#d1ccc0', fg='black',command=delete
Book)
    SubmitBtn.place(relx=0.28,rely=0.9, relwidth=0.18,relheight=0.08)

    quitBtn = Button(root,text="Quit",bg='#f7f1e3', fg='black', command=root.dest
roy)
    quitBtn.place(relx=0.53,rely=0.9, relwidth=0.18,relheight=0.08)

    root.mainloop()
```

- Done by

B.S.Anirudh

Bhavesh Narayanan