ABSTRACT

The code is 351 lines.The program makes use of user-defined functions, SQL modules and conditional statements. Conditional statements including if, else, elif and for are used in all the user-defined functions and to use the necessary code block that the user requires and we also have used the statements as nested loop. We also the used tabulate library for the programming.

We have used the connector to connect MySQL and python. In MySQL we have created and used the database library and the tables created and used are ‘book details’ and ‘lent’.

And in IDLE firstly, we take the admin’s name and then the admin has to type in the correct password to get access, After the access is granted, we get a set of options to choose from. The options are as follows:

- Add function: Helps the admin to add a book entry.
- Update function: This is used to update the book name, the author's name, the name of publications and the number of available copies. The admin has a choice to choose between the 4 above mentioned functions. The options are given as subtopics to the update function using the if elif ladder.
- Delete function: The admin gets the access to delete a particular book according to their will.
- Lend function: helps the admin view the date when a customer borrowed the book and the date, they are supposed to return it.
- Return Function: helps the admin to view the return details of the customers

INDEX

INTRODUCTION

The “Library Management System” has been developed to override the problems prevailing in the practicing manual system. This software is supported to reduce the hardships faced by the existing system. Moreover, this system is designed for the particular need of the company to carry out operations in a smooth and efficient manner.

No formal knowledge is needed for the user to use this system. Thus, it proves user-friendly. This is designed to assist in strategic planning and will help you ensure that your organization is equipped with the right level of information and details for future goals.

The goal of the proposed project is to utilize various python functions and modules. This goal is achieved by using:

- User-defined functions
- User input functions
- Loops
- Conditional Statements
- SQL module

The table can only be used by an admin. The admin has various options to add, update and delete data. The program is user-friendly and time-efficient.

DESIGN

The code is 351 lines.The program makes use of user-defined functions, SQL modules and conditional statements. Conditional statements including if, else, elif and for are used in all the user-defined functions and to use the necessary code block that the user requires and we also have used the statements as nested loop. We also the used tabulate library for the programming.

We have used the connector to connect MySQL and python. In MySQL we have created and used the database library and the tables created and used are book details and lent

And in IDLE firstly, we take the admin's name and then the admin has to type in the correct password to get access, After the access is granted, we get a set of options to choose from. The options are as follows:

- Add function: Helps the admin to add a book entry.
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- Delete function: The admin gets the access to delete a particular book according to their will.
- Lend function: helps the admin view the date when a customer borrowed the book and the date, they are supposed to return it.
- Return Function: helps the admin to view the return details of the customers.

HARDWARE AND SOFTWARE REQUIREMENT

Hardware Requirements:

- Laptop-Windows 10
- 64-bit operating system
- 8 GB RAM
- Processor: - Intel(R) Core(TM) i5-10210U CPU @ 1.60GHz 2.11 GHz

Software Requirements:

- Python 3.10.7
- MySQL 8.0

Operating System:

- Windows 10-. High security, voice command, high-speed performance, etc. are its top benefits. With Windows 10 has successfully combined the best usability features from Windows 7 and Windows 8.1 to create an improved OS.

SOURCE CODE

```
print("-----------------------------------------------------")
print("|                                                   |")
print("|          WELCOME TO IGNITE LIBRARY !!!            |")
print("|                                                   |")
print("-----------------------------------------------------")
print(" ")
print(" ")
print("::::::::::::::::::::::::::::::::::::::::::::::::::::")
print(" ")
print("----------------------LOGIN--------------------------")
print("                                                    ")
print("::::::::::::::::::::::::::::::::::::::::::::::::::::")
admins0={"Maaziya":1974,"Arathi":9339}
print(" ")
print(" ")
k=0
while k==0:
   adm=input("Enter Admin Name:")
   if adm not in admins0:
      print(" ")
      print("--------------------Invalid Admin Name!!!-------------------")
      continue
   else:
      print(" ")
      k=0
      while k==0:
         pwd=int(input("Enter Password:"))
         print(" ")
         print(" ")
         if pwd==admins0[adm]:
               print("Access Granted !")
```

```
print("::::::::::::::::::::::::::::::::::::::::::::::::::::::::")
print("                                        ")
k=0
while k==0:
    print("1. Display Book Details")
    print("2. Add Book")
    print("3. Update details of a book")
    print("4. Delete a book")
    print("5. Lend a book")
    print("6. Return a book")
    print("7. View options for issued books")
    print("8. View details of Unreturned books")
    print("9. EXIT PAGE")
    print(" ")
    print("-"*120)
    choice=int(input("Choose an option from above:"))
    print(" ")
    if choice==1:
        print("------->1. View Details of All Books")
        print("------->2. View Details of a Specific Book")
        print("------->3. View Details of Books, Select By Author")
        print("------->4. View Details of Books, Select by Publication")
        print(" ")
        print("-"*120)
        print(" ")
        choice3=int(input("Select an option from above:"))
        print(" ")
        print("-"*120)
        print(" ")
        if choice3==1:
            cur.execute("select * from bookdetails;")
            z=cur.fetchall()
```

```
                print("-"*120)
                print("-"*120)
                from tabulate import tabulate
                print(tabulate(z,headers=["Book Number","Book
Name","Author","Publication","Number of Copies"]))
                print("-"*120)
                print("-"*120)
            elif choice3==2:
                bnum=input("Enter the book number:")
                cur.execute("select * from bookdetails where bno={}".format(bnum))
                m=cur.fetchall()
                from tabulate import tabulate
                print("-"*120)
                print("-"*120)
                print(tabulate(m,headers=["Book Number","Book
Name","Author","Publication","Number of Copies"]))
                print("-"*120)
                print("-"*120)
            elif choice3==3:
                auth2=input("Enter authour name:")
                cur.execute("Select * from bookdetails where auth='{}'".format(auth2))
                r=cur.fetchall()
                from tabulate import tabulate
                print("-"*120)
                print("-"*120)
                print(tabulate(r,headers=["Book Number","Book
Name","Author","Publication","Number of Copies"]))
                print("-"*120)
                print("-"*120)
            elif choice3==4:
                pub2=input("Enter publication name:")
                cur.execute("Select * from bookdetails where publ='{}'".format(pub2))
                h=cur.fetchall()
```

```
                from tabulate import tabulate
                print("-"*120)
                print("-"*120)
                print(tabulate(h,headers=["Book Number","Book
Name","Author","Publication","Number of Copies"]))
                print("-"*120)
                print("-"*120)
            else:
                print(" ")
                print(" ")
                print("-------------------------------------------------Invalid Choice!-----------------------------------
--------------------")
                print(" ")
                print(" ")
        elif choice==2:
            add_book()
        elif choice==3:
            update_book()
        elif choice==4:
            del_book()
        elif choice==5:
            lend_book()
        elif choice==6:
            return_book()
        elif choice==7:
            print("-----> 1. Display today's Issue Details")
            print("-----> 2. Display Issue Details of the last 3 days")
            print("-----> 3. Display Issue Details of the last 7 days")
            print(" ")
            print("-"*120)
            print(" ")
            choiced=int(input("Select an option from above:"))
            print(" ")
```

```
                print("-"*120)
                print(" ")
                if choiced==1:
                    from datetime import date,time,timedelta
                    dt=str(date.today())
                    cur.execute("select * from lent where borroweddate='{}'".format(dt))
                    rd1=cur.fetchall()
                    from tabulate import tabulate
                    print("-"*120)
                    print("-"*120)
                    print(tabulate(rd1,headers=["Book Number","Book Name","Student ID", "Student Name", "Borrow Date","Return date","Returned"]))
                    print("-"*120)
                    print("-"*120)
                elif choiced==2:
                    from datetime import date,time,timedelta
                    dt1=str(date.today() - timedelta(days=3))
                    cur.execute("select * from lent where borroweddate>='{}'".format(dt1))
                    rd2=cur.fetchall()
                    from tabulate import tabulate
                    print("-"*120)
                    print("-"*120)
                    print(tabulate(rd2,headers=["Book Number","Book Name","Student ID", "Student Name", "Borrow Date","Return date","Returned"]))
                    print("-"*120)
                    print("-"*120)
                elif choiced==3:
                    from datetime import date,time,timedelta
                    dt2=str(date.today() - timedelta(days=7))
                    cur.execute("select * from lent where returneddate>='{}'".format(dt2))
                    rd3=cur.fetchall()
                    from tabulate import tabulate
                    print("-"*120)
```

```
                print("-"*120)
                print(tabulate(rd3,headers=["Book Number","Book Name","Student ID", "Student Name", "Borrow Date","Return date","Returned"]))
                print("-"*120)
                print("-"*120)
            else:
                print("----------------------------------------------Invalid Choice!-----------------------------------------------")
        elif choice==8:
            cur.execute("select * from lent where returned='{}'".format('No'))
            c=cur.fetchall()
            from tabulate import tabulate
            print("-"*120)
            print("-"*120)
            print(tabulate(c,headers=["Book Number","Book Name","Student ID", "Student Name", "Borrow Date","Return date","Returned"]))
            print("-"*120)
            print("-"*120)
        elif choice==9:
            k=1
            print("Thank you for visiting IGNITE Library!")
            continue
        else:
            print("----------------------------------------------INVALID OPTION!-----------------------------------------------\nPlease choose an option from below.")
            print("")
            print("-"*117)
            continue
    else:
        print("Incorrect Password! Access Denied !")
        continue
```

MAIN CODE

```
import mysql.connector as mc
con=mc.connect(host="localhost",user="root",password="akb999",database="library")
cur=con.cursor()

import mysql.connector as mc
con=mc.connect(host="localhost",user="root",password="akb999",database="library")
cur=con.cursor()

def add_book() :
   print('Add Book')
   bno=input("Enter book number")
   if bno.isdigit():
         cur.execute("select * from bookdetails where bno="+bno)
         test=cur.fetchone()
         if test==None:
            bname = input("Enter the Book's Name : ")
            auth = input("Enter the Author of the Book : ")
            publ = input("Enter the Publisher of the Book : ")
            num=input("Enter the number of copies availabe : ")
            if num.isdigit():
               print()
            else:
               print("-"*60)
               print('Invalid Entry!!!\nPlease enter an integer value')
               print("-"*60)
            cur.execute("INSERT INTO bookdetails VALUES({} , '{}' , '{}' , '{}' , {})".format(bno , bname ,
auth , publ ,num))
            print("Inserted Sucessfully !!!")
            con.commit()
         else:
            print()
```

```
            print('------------------------')
            print('A book already exists in this number')
            print()
            print("Please enter another book number")
            print('------------------------')
            print()


def update_book():
    print("-"*60)
    print('UPDATE BOOK:')
    print("-"*60)
    udb=input("Enter the book number of the book to be updated")
    if udb.isdigit():
        cur.execute("select * from bookdetails where bno="+udb)
        test1=cur.fetchone()
        print("-"*60)
        if test1==None:
            print('Invalid Entry!!!\nPlease enter an integer value')
            print("-"*60)
        else:
            print("1. Update Book Name\n2. Update Author Name\n3. Update Publication Name\n4.
Update Number of Copies of Available")
            choice=int(input("Select an option from above:"))
            if choice==1:
                uname=input("Enter the new book name here:")
                cur.execute("Update bookdetails set bname='{}' where bno={}".format(uname,udb))
                con.commit()
                print("Updated successfully !!!")
            elif choice==2:
                uauth=input("Enter the new author name here:")
                cur.execute("Update bookdetails set auth='{}' where bno={}".format(uauth,udb))
                con.commit()
```

```
            print("Updated successfully !!!")
        elif choice==3:
            upub=input("Enter the new publication name here:")
            cur.execute("Update bookdetails set publ='{}' where bno={}".format(upub,udb))
            con.commit()
            print("Updated successfully !!!")
        elif choice==4:
            newnum=input("Enter the new number of copies of book")
            if newnum.isdigit():
                print()
                cur.execute("update bookdetails set num={} where bno={}".format(newnum,udb))
                con.commit()
                print("Updated successfully !!!")
            else:
                print("-"*60)
                print('Invalid Entry!!!\nPlease enter an integer value')
                print("-"*60)
    else:
        print("Please enter an integer value !")

def del_book():
    print("-"*60)
    print("DELETE BOOK:")
    print("-"*60)
    bd=input("Enter the book no.")
    if bd.isdigit():
        print()
    else:
        print("-"*60)
        print('Invalid Entry!!!\nPlease enter an integer value')
        print("-"*60)
    cur.execute("delete from bookdetails where bno={}".format(bd))
```

```
    con.commit()
    print("Deleted successfully !!!")


def lend_book() :
    print("-"*60)
    print("LEND BOOK:")
    print("-"*60)
    from datetime import date,time,timedelta
    stid=input("Enter Student ID:")
    if stid.isdigit():
       print()
    else:
        print("-"*60)
        print('Invalid Entry!!!\nPlease enter an integer value')
        print("-"*60)
    stname = input("Enter the Student Name : ")
    bno = input("Enter book number : ")
    if bno.isdigit():
       cur.execute("select * from bookdetails where bno="+bno)
       test=cur.fetchone()
       if test==None:
          print("Invalid Book Number! Try Again")
       else:
           bname = input("Enter the name of the book : ")
           bdate=date.today()
           rdate=bdate + timedelta(days=7)
           cur.execute("insert into lent
values({},'{}',{},'{}','{}','{}','{}')".format(bno,bname,stid,stname,bdate,rdate,"No"))
           con.commit()
           cur.execute("update bookdetails set num = num - 1 where bno = {}".format(bno))
           con.commit()
           print("Lent Successfully !!!")
```

```
    else:
        print("-"*60)
        print('Invalid Entry!!!\nPlease enter an integer value')
        print("-"*60)

def return_book():
    print("-"*60)
    print("RETURN BOOK:")
    print("-"*60)
    from datetime import date,time,timedelta
    rdate=date.today()
    stid=input("Enter Student ID:")
    if stid.isdigit():
       print()
    else:
        print("-"*60)
        print('Invalid Entry!!!\nPlease enter an integer value')
        print("-"*60)
    stname = input("Enter the Student Name : ")
    bno = input("Enter book number : ")
    if bno.isdigit():
       cur.execute("select * from bookdetails where bno="+bno)
       test=cur.fetchone()
       if test==None:
          print("Invalid Book Number! Try Again")
       else:
          print()
    else:
        print("-"*60)
        print('Invalid Entry!!!\nPlease enter an integer value')
        print("-"*60)
    bname = input("Enter the name of the book : ")
```

```
    cur.execute("update lent set returneddate='{}',returned='{}' where userid={} and
bno={}".format(rdate,"yes",stid,bno))

    cur.execute("update bookdetails set num = num + 1 where bno = {}".format(bno))

    con.commit()

    print("Returned Successfully !!!")
```

TABLES IN MY SQL

```
mysql> select * from bookdetails;
+-----+-------------------------------+---------------------+-------------------------------+------+
| bno | bname                         | auth                | publ                          | num  |
+-----+-------------------------------+---------------------+-------------------------------+------+
| 111 | wings of fire                 | APJ Abdul Kalam     | Penguin                       |    3 |
| 113 | The Maidens                   | Alex Michaliedes    | ABC                           |    2 |
| 114 | Computer Science with Python  | Sumitha Arora       | Dhanpat Rai&Co                |    5 |
| 115 | Rich Dad Poor Dad             | Robert K & Sharon L | Warner Books                  |   10 |
| 116 | The Alchemist                 | Paulo Coelho        | HarperTorch                   |    3 |
| 117 | HTNAE: How to name an element | Dr Fathima Maaziya  | Fireflies Publications        |   15 |
| 118 | Educated                      | Tara Westover       | Random House                  |    6 |
| 119 | Vogue Arabia                  | Manuel Arnaut       | Condé Nast                    |   13 |
| 121 | Murder on the orient express  | Agatha Christie     | Harper Collins Publishers Ltd |    8 |
| 122 | This lie will kill you        | Chelsea Pitcher     | S&S Childrens Books           |    4 |
| 123 | Every last word               | Tamara Ireland Stone| Hyperion                      |    3 |
| 124 | Nine Perfect Strangers        | Liane Moriarty      | Flatiron Books                |   10 |
| 125 | Into the water                | Paula Hawkins       | Doubleday                     |   12 |
| 126 | The girl on the train         | Paula Hawkins       | Black Swan                    |   12 |
| 127 | And Then There Were None      | Agatha Christie     | William M & Company           |    8 |
| 128 | The silent patient            |  Alex Michaelides   | Celadon Books                 |    2 |
| 129 | Holding up the universe       |  Jennifer Niven     |  Penguin                      |    1 |
| 130 | November 9                    | Colleen Hoover      | Simon & Schuster              |   13 |
+-----+-------------------------------+---------------------+-------------------------------+------+
18 rows in set (0.01 sec)
```

```
mysql> select * from lent;
+------+--------------------+--------+--------------+--------------+--------------+----------+
| bno  | bname              | userid | username     | borroweddate | returneddate | returned |
+------+--------------------+--------+--------------+--------------+--------------+----------+
|  111 | Wings of Fire      |    203 | Maaziya      | 2022-09-09   | 2022-09-10   | No       |
|  113 | The Maidens        |    204 | Arathi       | 2022-09-09   | 2022-09-10   | yes      |
|  112 | Into The Water     |    219 | Nida         | 2022-09-02   | 2022-09-10   | yes      |
|  119 | Vogue Arabia       |    213 | Niya Fathima | 2022-09-10   | 2022-09-17   | No       |
|  115 | Rich Dada Poor Dad |    219 | Saraamma     | 2022-09-10   | 2022-09-10   | yes      |
+------+--------------------+--------+--------------+--------------+--------------+----------+
5 rows in set (0.00 sec)
```

OUTPUTS

```
>>>
================================== RESTART: C:\Users\user\OneDrive\Desktop\librarymanagement.py ==================================
-----------------------------------------------------
|                                                   |
|           WELCOME TO IGNITE LIBRARY !!!           |
|                                                   |
-----------------------------------------------------


:::::::::::::::::::::::::::::::::::::::::::::::::::::

----------------------LOGIN--------------------------

:::::::::::::::::::::::::::::::::::::::::::::::::::::


Enter Admin Name:Arathi

Enter Password:555


Incorrect Password! Access Denied !
>>>
```

Ln: 48 Col: 0

```
-----------------------------------------------------
|                                                   |
|           WELCOME TO IGNITE LIBRARY !!!           |
|                                                   |
-----------------------------------------------------


:::::::::::::::::::::::::::::::::::::::::::::::::::::

----------------------LOGIN--------------------------

:::::::::::::::::::::::::::::::::::::::::::::::::::::


Enter Admin Name:Arathi

Enter Password:9339


Access Granted !
:::::::::::::::::::::::::::::::::::::::::::::::::::::

1. Display Book Details
2. Add Book
3. Update details of a book
4. Delete a book
5. Lend a book
6. Return a book
7. View options for issued books
8. View details of Unreturned books
9. EXIT PAGE

-------------------------------------------------------------------------------------------------------------------------
Choose an option from above:
```

REPORTS

REPORT 1

```
1. Display Book Details
2. Add Book
3. Update details of a book
4. Delete a book
5. Lend a book
6. Return a book
7. View options for issued books
8. View details of Unreturned books
9. EXIT PAGE

-------------------------------------------------------------------------------------------------------------------------------
Choose an option from above:1

------->1. View Details of All Books
------->2. View Details of a Specific Book
------->3. View Details of Books, Select By Author
------->4. View Details of Books, Select by Publication

-------------------------------------------------------------------------------------------------------------------------------

Select an option from above:
```

REPORT 1.1

```
------->1. View Details of All Books
------->2. View Details of a Specific Book
------->3. View Details of Books, Select By Author
------->4. View Details of Books, Select by Publication

-------------------------------------------------------------------------------------------------------------------------------

Select an option from above:1

-------------------------------------------------------------------------------------------------------------------------------

-------------------------------------------------------------------------------------------------------------------------------
-------------------------------------------------------------------------------------------------------------------------------
  Book Number  Book Name                        Author                Publication                       Number of Copies
-------------  -----------------------------  --------------------  -------------------------------  ------------------
          111  wings of fire                  APJ Abdul Kalam       Penguin                                          3
          113  The Maidens                    Alex Michaliedes      ABC                                              2
          114  Computer Science with Python   Sumitha Arora         Dhanpat Rai&Co                                   5
          115  Rich Dad Poor Dad              Robert K & Sharon L   Warner Books                                    10
          116  The Alchemist                  Paulo Coelho          HarperTorch                                      3
          117  HTNAE: How to name an element  Dr Fathima Maaziya    Fireflies Publications                          15
          118  Educated                       Tara Westover         Random House                                     6
          119  Vogue Arabia                   Manuel Arnaut         Condé Nast                                      13
          121  Murder on the orient express   Agatha Christie       Harper Collins Publishers Ltd                    8
          122  This lie will kill you         Chelsea Pitcher       S&S Childrens Books                              4
          123  Every last word                Tamara Ireland Stone  Hyperion                                       3
          124  Nine Perfect Strangers         Liane Moriarty        Flatiron Books                                  10
          125  Into the water                 Paula Hawkins         Doubleday                                       12
          126  The girl on the train          Paula Hawkins         Black Swan                                      12
          127  And Then There Were None       Agatha Christie       William M & Company                              8
          128  The silent patient             Alex Michaelides      Celadon Books                                    2
          129  Holding up the universe        Jennifer Niven        Penguin                                          1
          130  November 9                     Colleen Hoover        Simon & Schuster                                13
-------------------------------------------------------------------------------------------------------------------------------
```

REPORT 1.2

```
Choose an option from above:1

------->1. View Details of All Books
------->2. View Details of a Specific Book
------->3. View Details of Books, Select By Author
------->4. View Details of Books, Select by Publication

Select an option from above:2

Enter the book number:111
  Book Number  Book Name      Author           Publication      Number of Copies
-------------  -------------  ---------------  -------------  ------------------
          111  wings of fire  APJ Abdul Kalam  Penguin                         3
>>>
```

REPORT 1.3

```
Choose an option from above:1

------->1. View Details of All Books
------->2. View Details of a Specific Book
------->3. View Details of Books, Select By Author
------->4. View Details of Books, Select by Publication

Select an option from above:3

Enter authour name:Paula Hawkins
  Book Number  Book Name              Author         Publication      Number of Copies
-------------  --------------------  -------------  -------------  ------------------
          125  Into the water        Paula Hawkins  Doubleday                      12
          126  The girl on the train  Paula Hawkins  Black Swan                     12
```

REPORT 1.4

```
Choose an option from above:1

------->1. View Details of All Books
------->2. View Details of a Specific Book
------->3. View Details of Books, Select By Author
------->4. View Details of Books, Select by Publication

Select an option from above:4

Enter publication name:Penguin
  Book Number  Book Name      Author           Publication      Number of Copies
-------------  -------------  ---------------  -------------  ------------------
          111  wings of fire  APJ Abdul Kalam  Penguin                         3
>>>
```

REPORT 2

```
1. Display Book Details
2. Add Book
3. Update details of a book
4. Delete a book
5. Lend a book
6. Return a book
7. View options for issued books
8. View details of Unreturned books
9. EXIT PAGE

------------------------------------------------------------------------------------------------------------------------
Choose an option from above:2

------------------------------------------------------------
ADD BOOK:
------------------------------------------------------------
Enter book number131
Enter the Book's Name : The 5 AM Club
Enter the Author of the Book : Robin Sharma
Enter the Publisher of the Book : Penguin
Enter the number of copies availabe : 3

Inserted Sucessfully !!!
>>>
```

REPORT 3

```
1. Display Book Details
2. Add Book
3. Update details of a book
4. Delete a book
5. Lend a book
6. Return a book
7. View options for issued books
8. View details of Unreturned books
9. EXIT PAGE

------------------------------------------------------------------------------------------------------------------------
Choose an option from above:3

------------------------------------------------------------
UPDATE BOOK:
------------------------------------------------------------
Enter the book number of the book to be updated111
------------------------------------------------------------
1. Update Book Name
2. Update Author Name
3. Update Publication Name
4. Update Number of Copies of Available
Select an option from above:1
```

REPORT3.1

```
------------------------------------------------------------
UPDATE BOOK:
------------------------------------------------------------
Enter the book number of the book to be updated111
------------------------------------------------------------
1. Update Book Name
2. Update Author Name
3. Update Publication Name
4. Update Number of Copies of Available
Select an option from above:1
Enter the new book name here:Wings Of Fire
Updated successfully !!!
>>>
```

REPORT 3.2

```
------------------------------------------------------------
UPDATE BOOK:
------------------------------------------------------------
Enter the book number of the book to be updated111
------------------------------------------------------------
1. Update Book Name
2. Update Author Name
3. Update Publication Name
4. Update Number of Copies of Available
Select an option from above:2
Enter the new author name here:APJ Abdul Kalam
Updated successfully !!!
>>>
```

REPORT 3.3

```
------------------------------------------------------------
UPDATE BOOK:
------------------------------------------------------------
Enter the book number of the book to be updated111
------------------------------------------------------------
1. Update Book Name
2. Update Author Name
3. Update Publication Name
4. Update Number of Copies of Available
Select an option from above:3
Enter the new publication name here:Penguin
Updated successfully !!!
>>>
```

REPORT 3.4

```
------------------------------------------------------------
UPDATE BOOK:
------------------------------------------------------------
Enter the book number of the book to be updated111
------------------------------------------------------------
1. Update Book Name
2. Update Author Name
3. Update Publication Name
4. Update Number of Copies of Available
Select an option from above:4
Enter the new number of copies of book4

Updated successfully !!!
>>>
```

REPORT 4

```
1. Display Book Details
2. Add Book
3. Update details of a book
4. Delete a book
5. Lend a book
6. Return a book
7. View options for issued books
8. View details of Unreturned books
9. EXIT PAGE

------------------------------------------------------------------------------------------------------------------------
Choose an option from above:4

------------------------------------------------------------
DELETE BOOK:
------------------------------------------------------------
Enter the book no.131

Deleted successfully !!!
>>>
```

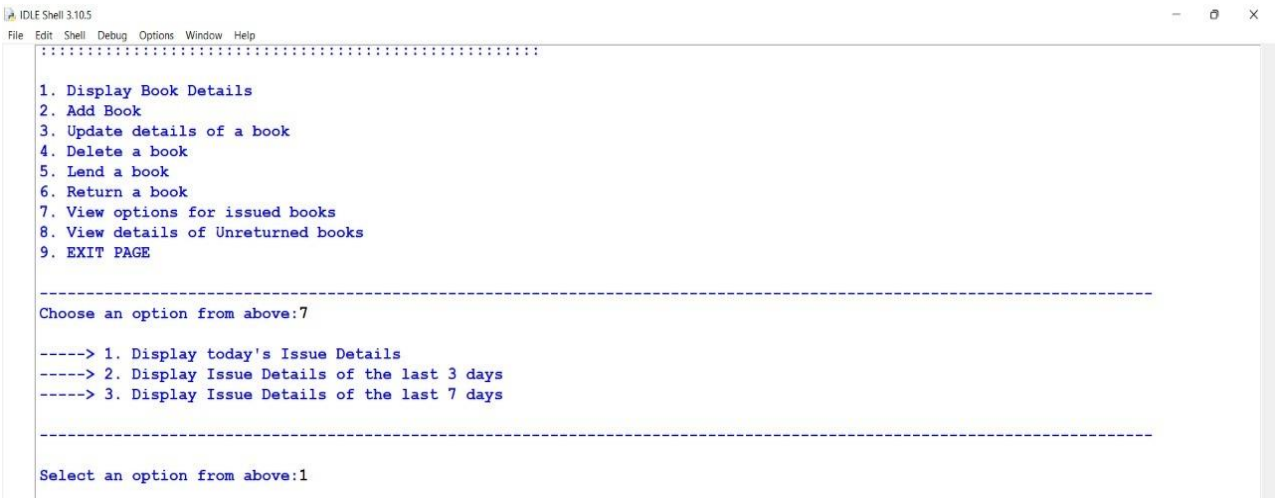
REPORT 5

```
1. Display Book Details
2. Add Book
3. Update details of a book
4. Delete a book
5. Lend a book
6. Return a book
7. View options for issued books
8. View details of Unreturned books
9. EXIT PAGE

------------------------------------------------------------------------------------------------------------------------
Choose an option from above:5

------------------------------------------------------------
LEND BOOK:
------------------------------------------------------------
Enter Student ID:456

Enter the Student Name : Harsha
Enter book number : 111

Enter the name of the book : Wings of Fire
Lent Successfully !!!
>>>
```

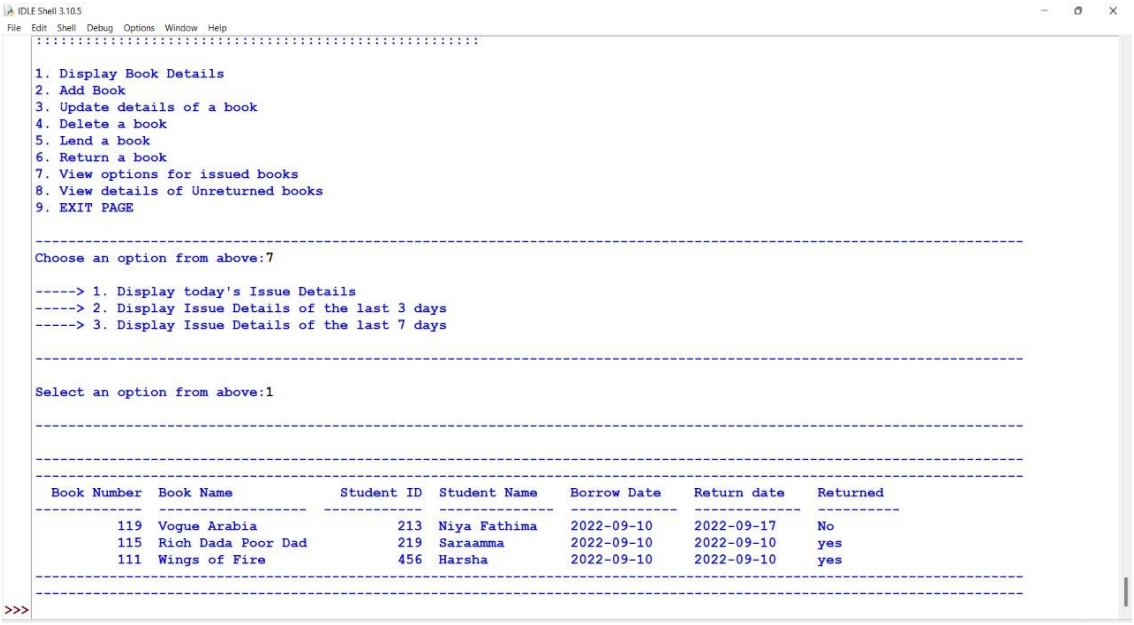
REPORT 6

```
1. Display Book Details
2. Add Book
3. Update details of a book
4. Delete a book
5. Lend a book
6. Return a book
7. View options for issued books
8. View details of Unreturned books
9. EXIT PAGE

------------------------------------------------------------------------------------------------------------------------
Choose an option from above:6

------------------------------------------------------------
RETURN BOOK:
------------------------------------------------------------
Enter Student ID:456

Enter the Student Name : Harsha
Enter book number : 111

Enter the name of the book : Wings of Fire
Returned Successfully !!!
>>>
```

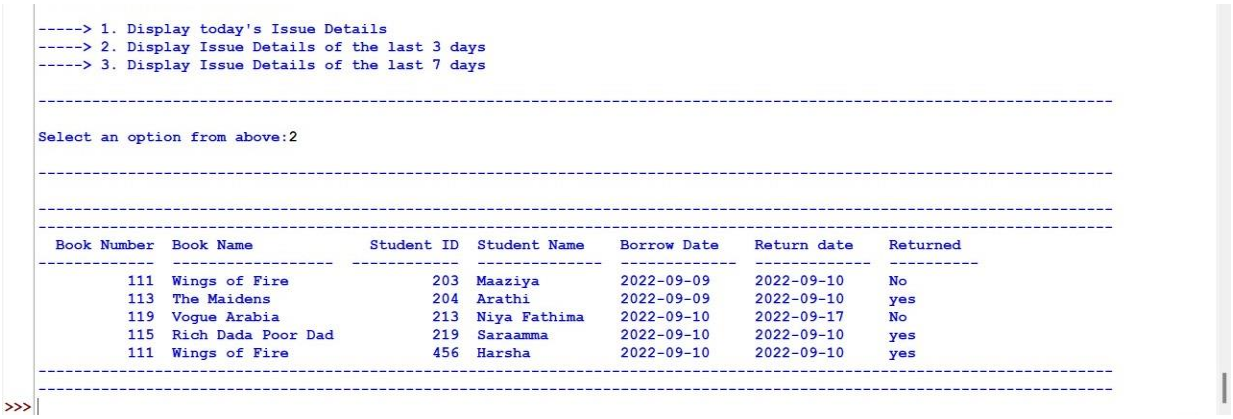
REPORT 7



REPORT 7.1



REPORT 7.2



REPORT 7.3

```
-----> 1. Display today's Issue Details
-----> 2. Display Issue Details of the last 3 days
-----> 3. Display Issue Details of the last 7 days

--------------------------------------------------------------------------------------------------------------------------------

Select an option from above:3

--------------------------------------------------------------------------------------------------------------------------------


--------------------------------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------------------------------------------
  Book Number  Book Name             Student ID  Student Name    Borrow Date    Return date    Returned
-------------  ------------------  ------------  --------------  -------------  -------------  ----------
          111  Wings of Fire                203  Maaziya         2022-09-09     2022-09-10     No
          113  The Maidens                  204  Arathi          2022-09-09     2022-09-10     yes
          112  Into The Water               219  Nida            2022-09-02     2022-09-10     yes
          119  Vogue Arabia                 213  Niya Fathima    2022-09-10     2022-09-17     No
          115  Rich Dada Poor Dad           219  Saraamma        2022-09-10     2022-09-10     yes
          111  Wings of Fire                456  Harsha          2022-09-10     2022-09-10     yes
--------------------------------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------------------------------------------
>>>
```

REPORT 8

```
1. Display Book Details
2. Add Book
3. Update details of a book
4. Delete a book
5. Lend a book
6. Return a book
7. View options for issued books
8. View details of Unreturned books
9. EXIT PAGE

--------------------------------------------------------------------------------------------------------------------------------
Choose an option from above:8

--------------------------------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------------------------------------------
  Book Number  Book Name         Student ID  Student Name    Borrow Date    Return date    Returned
-------------  -------------  ------------  --------------  -------------  -------------  ----------
          111  Wings of Fire             203  Maaziya         2022-09-09     2022-09-10     No
          119  Vogue Arabia              213  Niya Fathima    2022-09-10     2022-09-17     No
--------------------------------------------------------------------------------------------------------------------------------
--------------------------------------------------------------------------------------------------------------------------------
>>>
```

REPORT 9

```
1. Display Book Details
2. Add Book
3. Update details of a book
4. Delete a book
5. Lend a book
6. Return a book
7. View options for issued books
8. View details of Unreturned books
9. EXIT PAGE

--------------------------------------------------------------------------------------------------------------------------------
Choose an option from above:9

------------------------------------------------------
|                                                    |
|    THANKYOU FOR VISITING IGNITE LIBRARY !!!        |
|                                                    |
------------------------------------------------------
>>>
```

CONCLUSION

The above code is a very simple and user-friendly code that can be used by anyone managing a library. Python is a general-purpose coding language, which means that you can use it for a variety of programming tasks. Some of these tasks include back-end development, software development and writing system scripts. Data scientists often use Python because it's simple syntax and popularity in the industry make it easy to collaborate. Because of its ability to work with various platforms and its emphasis on readability, Python has become one of the preferred languages for data exploration. And MySQL helps us to keep track of various data into database helping people to store in large data. That's why using connector to connect MySQL and python is so efficient and both user and time friendly.

There are various projects made with the help of python and MySQL like vehicle management, pharmacy management, student record etc. can also be programmed with the same concept of the code given above. In conclusion, python is a very interactive platform to create and test many different codes to make our lives easier.

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