

तत् त्वं पूषन् अपावृणु केन्द्रीय विद्यालय संगठन 2019-20

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SCIENCE (083)
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"LIBRARY BOOK MANAGEMENT"

### **CERTIFICATE**

### THIS IS TO CERTIFY THAT THE PROJECT ENTITLED:

"LIBRARY BOOK MANAGEMENT"

ARNAV MODANWAL UNDER MY SUPERVISION IS A GENUINE WORK.

SIGNATURE OF SIGNATURE OF INTERNAL
PRINCIPAL EXAMINER
(DR. DIWAKAR SINGH) (MRS. PREETI SHARMA)

SIGNATURE OF EXTERNAL EXAMINER

## **ACKNOWLEDGEMENT**

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### INTRODUCTION

This project helps to manage book record in Library.

This project contains two modules:

- i. MENU
- ii. BOOK

Module MENU provides six options:

- i. Add Book Record
- ii. Display Book Record
- iii. Search Book Record
- iv. Delete Book Record
- v. Update Book Record
- vi. Exit

Module BOOK has five functions:

- i. insertData(): Helps to add a new Book record
- ii. display(): Shows all the Book records
- iii. SearchBookrRec(): Helps to Search a Book record
- iv. deleteBook(): Helps to delete a Book record
- v. UpdateBook(): Helps to update a Book record

**DATABASE USED:** library

TABLE USED: bookrecord

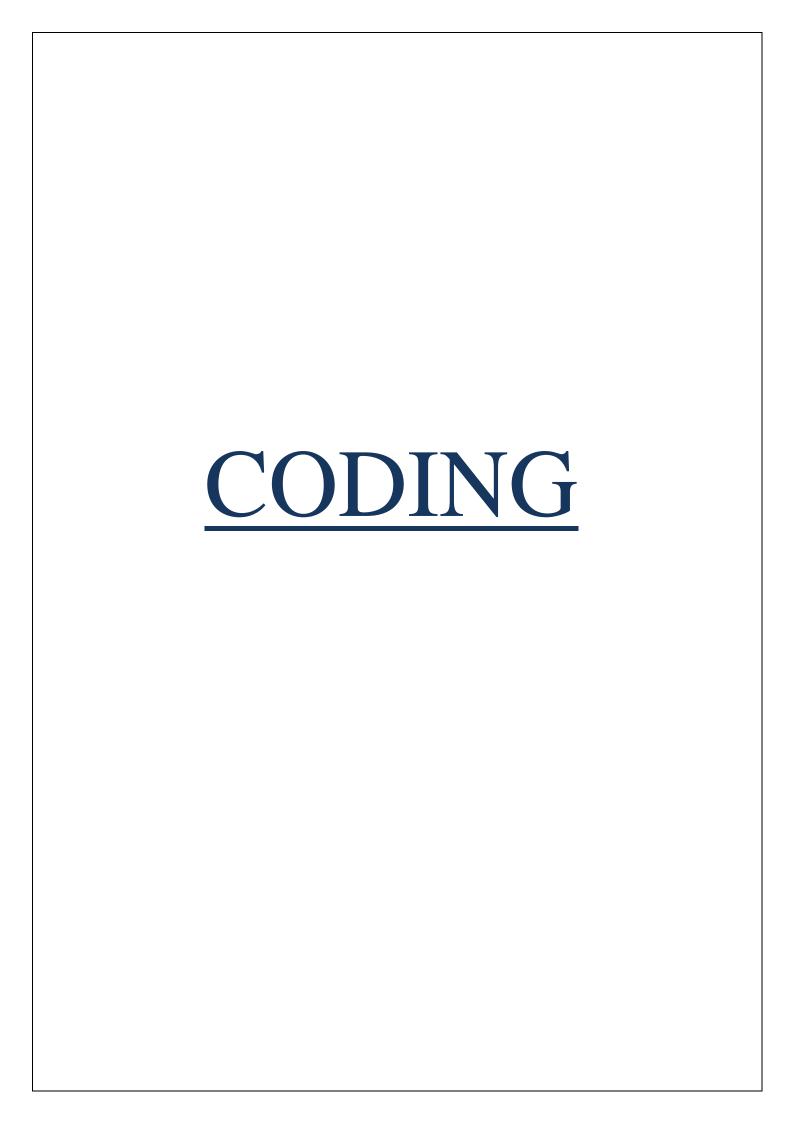
SOFTWARE REQIRED ARE: Python (version 3.x and above)

XAMPP or MySQL

PRE-REQISITES: Module mysql.connector must be installed in python

using command pip install mysql-connector-python

FUTRE SCOPE: This project can further be extended to include student details, teacher details, fine calculation etc. It can also be further improved by using error handling.



## MySQL QUERY

#### **#TO CREATE DATABASE:**

CREATE DATABASE library;

**#TO USE DATABASE:** 

USE DATABASE library;

**#TO CREATE TABLE bookrecord:** 

CREATE TABLE bookrecord(Bno int(4) PRIMARY KEY,

Bname varchar(50),

Author vachar(20),

price float(5,2),

publ varchar(15),

qty int(3),

d\_o\_purchase varchar(12));

# PYTHON MODULE 'MENU'

```
import BOOK
def MenuBook():
     while True:
          print("\t\t Book Record Management\n")
          ")
          print("1.Add Book Record
                                       ")
          print("2.Display Book Records
          print("3.Search Book Record
                                       ")
          print("4.Delete Book Record
                                       ")
                                       ")
          print("5.Update Book Record
          print("6.Exit
          choice=int(input("Enter choice between 1 to 5---->:"))
          if choice==1:
               BOOK.insertData()
          elif choice==2:
               BOOK.display()
          elif choice==3:
              BOOK.SearchBookRec()
          elif choice==4:
               BOOK.deleteBook()
          elif choice==5:
```

```
BOOK.UpdateBook()\\
           elif choice==6:
                break
           else:
                print("Wrong Choice.....Enter your choice again ")
                x=input("Enter any key to continue ")
MenuBook()
```

# PYTHON MODULE 'BOOK'

import mysql.connector as ms

cnx.close()

### **#FUNCTION TO DISPLAY BOOKS IN LIBRARY**

def display(): cnx=ms.connect(user='root',passwd=",host='localhost',database='library') cursor=cnx.cursor() query=("SELECT \* FROM bookrecord") cursor.execute(query) for (Bno,Bname,Author,price,publ,qty,d\_o\_purchase) in cursor: print("BOOK CODE :",Bno) print("BOOK NAME :",Bname) print("AUTHOR OF BOOK :",Author) print("PRICE OF BOOK :",price) print("PUBLISHER :",publ) print("TOTAL QUANTITY IN HAND :",qty) print("PURCHASED ON :",d\_o\_purchase) print("YOU HAVE DONE IT!!!!!")

### #FUNCTION TO INSERT A BOOK IN RECORD

```
def insertData():
     cnx=ms.connect(user="root",passwd="",host="localhost",database="library")
     cursor=cnx.cursor()
     bno=int(input("ENTER BOOK CODE :"))
     bname=input("ENTER BOOK NAME :")
     Auth=input("ENTER BOOK AUTHOR'S NAME:")
     price=float(input("ENTER BOOK PRICE :"))
     publ=input("ENTER PUBLISHER OF BOOK :")
     qty=int(input("ENTER QUANTITY PURCHASED :"))
     print("ENTER DATE OF PURCHASE (DATE, MONTH AND YEAR
          SEPARATELY:")
     DD=input("ENTER DATE :")
     MM=input("ENTER MONTH:")
     YY=input("ENTER YEAR :")
     dop=YY+'-'+MM+'-'+DD
     Qry=("INSERT INTO BookRecord VALUES (%s,%s,%s,%s,%s,%s,%s,%s)")
     data=(bno,bname,Auth,price,publ,qty,dop)
     cursor.execute(Qry,data)
     cnx.commit()
     cnx.close()
     print("RECORD INSERTED.....")
```

#### #FUNCTION TO DELETE A BOOK RECORD

```
def deleteBook():
     cnx=ms.connect(user="root",passwd="",host="localhost",database="library")
     cursor=cnx.cursor()
     bno=int(input("ENTER BOOK CODE OF BOOK TO BE DELETED FROM THE
                  LIBRARY:"))
     Qry=("DELETE FROM BookRecord WHERE Bno=%s")
     del_rec=(bno,)
     cursor.execute(Qry,del_rec)
     cnx.commit()
     cursor.close()
     cnx.close()
     print(cursor.rowcount,"RECORD(S) DELETED SUCCESSFULLY.....")
#FUNCTION TO SEARCH BOOK RECORD
def SearchBookRec():
     cnx=ms.connect(user="root",passwd="",host="localhost",database="library")
     cursor=cnx.cursor()
     bno=int(input("ENTER BOOK TO BE SEARCHED FROM THE LIBRARY:"))
     Qry=("SELECT * FROM BookRecord WHERE Bno=%s")
     rec_srch=(bno,)
     cursor.execute(Qry,rec_srch)
     rec_count=0
     for (Bno,Bname,Author,price,publ,qty,d_o_purchase) in cursor:
          rec_count+=1
```

```
print("BOOK CODE
                                        :",Bno)
         print("BOOK NAME
                                         :",Bname)
         print("AUTHOR OF BOOK
                                         :",Author)
         print("PRICE OF BOOK
                                         :",price)
         print("PUBLISHER
                                         :",publ)
         print("TOTAL QUANTITY IN HAND :",qty)
         print("PURCHASED ON
                                         :",d_o_purchase)
         if rec_count%2==0:
             input("PRESS ANY KEY TO CONTINUE")
             print(rec_count,"RECORD(S) FOUND")
    cnx.commit()
    cursor.close()
    cnx.close()
#FUNCTION TO UPDATE A BOOK RECORD
def UpdateBook():
    cnx=ms.connect(user="root",passwd="",host="localhost",database="library")
    cursor=cnx.cursor()
    bno=int(input("ENTER BOOK CODE OF BOOK TO BE UPDATED FROM THE
                LIBRARY :"))
    Qry=("SELECT * FROM BookRecord WHERE Bno=%s")
    rec_srch=(bno,)
    print("ENTER NEW DATA")
    bname=input("ENTER BOOK NAME :")
    Auth=input("ENTER BOOK AUTHOR'S NAME:")
    price=float(input("ENTER BOOK PRICE :"))
    publ=input("ENTER PUBLISHER OF BOOK :")
```

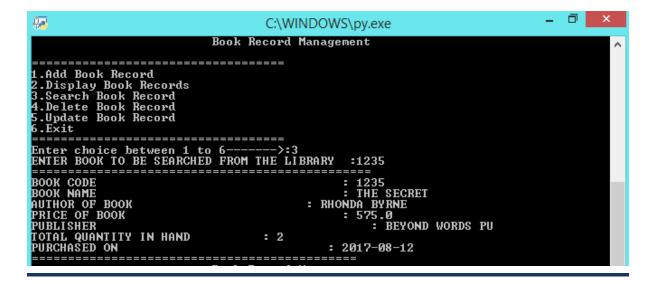
```
qty=int(input("ENTER QUANTITY PURCHASED :"))
print("ENTER DATE OF PURCHASE (DATE, MONTH AND YEAR
     SEPARATELY:")
DD=input("ENTER DATE :")
MM=input("ENTER MONTH:")
YY=input("ENTER YEAR :")
dop=YY+'-'+MM+'-'+DD
Qry=("UPDATE BookRecord SET
      Bname=%s,Author=%s,price=%s,publ=%s,qty=%s,d_o_purchase=%s WHERE
      Bno=\%s")
data=(bname,Auth,price,publ,qty,dop,bno)
cursor.execute(Qry,data)
cnx.commit()
cursor.close()
cnx.close()
print(cursor.rowcount, "RECORD(S) UPDATED SUCCESSFULLY.....")
```

## OUTPUT SCREENSHOTS

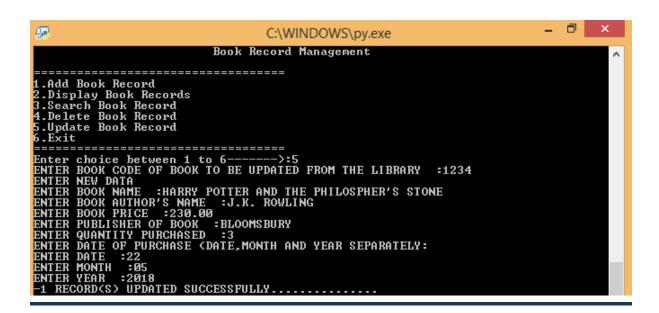
### Table bookrecord:

	#	Name	Туре	Collation	Attributes	Null	Default	Comments	Extra	Action			
	1	Bno 🔑	int(4)			No	None				Drop	▼	More
	2	Bname	varchar(50)	latin1_swedish_ci		Yes	NULL				Drop	▼	More
	3	Author	varchar(20)	latin1_swedish_ci		Yes	NULL			Change	Drop	▼	More
	4	price	float(5,2)			No	None			Change	Drop	▼	More
	5	publ	varchar(15)	latin1_swedish_ci		Yes	NULL			<i>P</i> Change	Drop	▼	More
	6	qty	int(3)			Yes	NULL			Change	Drop	▼	More
	7	d_o_purchase	varchar(12)	latin1_swedish_ci		Yes	NULL				Drop	▼	More

### Output:







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- 7. Youtube channel-Apni Kaksha <a href="https://www.youtube.com/channel/UC">https://www.youtube.com/channel/UC</a> <a href="f7BExjT2zH\_mmyqOB139Dg">F7BExjT2zH\_mmyqOB139Dg</a>