**Python script:-**

import mysql.connector

def connect\_to\_db(): #function to make a connection with the database.

conn = mysql.connector.connect(

host='localhost',

user='user\_is\_root',

password='123456789',

db='library\_manage'

)

return conn

print(connect\_to\_db) #prints the connection status of with the database.

def fetch\_data(query): #defining a cursor for fetching the data.

conn = connect\_to\_db()

cursor = conn.cursor()

cursor.execute(query)

rows = cursor.fetchall()

cursor.close()

conn.close()

return rows

def insert\_data(query, data): #definig a function for insertion of data into the database.

conn = connect\_to\_db()

cursor = conn.cursor()

cursor.execute(query, data)

conn.commit()

cursor.close()

conn.close()

def delete\_data(query, data): #defining a function for deletion of data from the database.

conn = connect\_to\_db()

cursor = conn.cursor()

cursor.execute(query, data)

conn.commit()

cursor.close()

conn.close()

def display\_results(results): #defining a function to display the retrieved data from the database.

for row in results:

print(row)

print()

def main\_menu():

‘’’ defining the function to give a user the options to perform operations to the database like insertion, deletion, retrieval operations’’’

while True:

print("Choose an operation:")

print("1. Insert Data")

print("2. Delete Data")

print("3. Retrieve Data")

print("4. Exit")

print()

choice = input("Enter your choice (1/2/3/4): ")

print()

if choice == '1':

insert\_menu()

elif choice == '2':

delete\_menu()

elif choice == '3':

retrieve\_menu()

elif choice == '4':

print("Exiting the program.")

break

else:

print("Invalid choice. Please try again.")

print()

def insert\_menu():

‘’’insertion function to insert data into various tables in the database.’’’

print("Insert Data into:")

print("1. Author")

print("2. Admins")

print("3. Books")

print("4. catogery")

print("5. users")

print("6. issued\_book")

print()

choice = input("Enter your choice (1/2/3/4/5/6): ")

print()

if choice == '1':

id = input("Enter author's ids: ")

name = input("Enter author's Name: ")

query = "INSERT INTO author (author\_id, author\_name) VALUES (%s, %s)"

data = (id, name)

elif choice == '2':

ids = input("Enter admin's ids: ")

Name = input("Enter admin's name: ")

Email = input("enter the email: ")

password = input("enter the password: ")

mobile\_no = input("enter the mobile number: ")

query = "INSERT INTO admins (ids,Name,Email,password,mobile\_no) VALUES (%s, %s,%s,%s,%s)"

data = (ids,Name,Email,password,mobile\_no)

elif choice == '3':

books\_id = input("Enter book's id: ")

books\_name = input("Enter book's name: ")

authors\_id = input("enter the id of author: ")

catogery\_id = input("enter the catogery id: ")

book\_nos = input("enter the number of books: ")

books\_price = input("enter the price of the book: ")

query = "INSERT INTO books (books\_id,books\_name,authors\_id,catogery\_id,book\_nos,books\_price) VALUES (%s,%s,%s,%s,%s,%s)"

data = (books\_id,books\_name,authors\_id,catogery\_id,book\_nos,books\_price)

elif choice == '4':

catogery\_id = input("enter the catogery id: ")

catogery\_name = input("enter the catogery name: ")

query = "INSERT INTO catogery (catogery\_id,catogery\_name) VALUES (%s,%s)"

data = (catogery\_id,catogery\_name)

elif choice == '5':

user\_id = input("enter the user's id: ")

name = input("enter the user's name: ")

email = input("enter the user's email please: ")

passkey = input("enter the password of the user: ")

phone = input("enter the phone number of user: ")

address = input("enter the full address of user: ")

query ="INSERT INTO users (user\_id,name,email,passkey,phone,address) VALUES (%s,%s,%s,%s,%s,%s)"

data = (user\_id,name,email,passkey,phone,address)

elif choice == '6':

serial\_no = input("please enter the serial number of the book: ")

book\_nos = input("please enter the book number: ")

books\_name = input("please enter the name of the book: ")

book\_author = input("please enter the name of the author: ")

user\_id = input("please enter the id of the user: ")

status = input("please enter the status(available/not available): ")

issue\_date = input("please enter the date of issue: ")

query = "INSERT INTO issued\_book(serial\_no,book\_nos,books\_name,book\_author,user\_id,status,issue\_date)VALUES (%s,%s,%s,%s,%s,%s,%s)"

data = (serial\_no,book\_nos,books\_name,book\_author,user\_id,status,issue\_date)

else:

print("Invalid choice.")

print()

return

print()

insert\_data(query, data)

print("Data inserted successfully.")

print()

def delete\_menu():

‘’’ deletion function to delete the records from various tables(from the database). ‘’’

print("Delete Data from:")

print("1. Author")

print("2. Admins")

print("3. Books")

print("4. catogery")

print("5. users")

print("6. issued\_book")

print()

choice = input("Enter your choice (1/2/3/4/5/6): ")

print()

if choice == '1':

id = input("Enter author's ID to delete: ")

query = "DELETE FROM author WHERE author\_id = %s"

elif choice == '2':

id = input("Enter admin's ID to delete: ")

query = "DELETE FROM admins WHERE ids = %s"

elif choice == '3':

id = input("Enter book's ID to delete: ")

query = "DELETE FROM books WHERE books\_id = %s"

elif choice == '4':

id = input("enter the catogery;s id please: ")

query = "DELET FROM catogery WHERE catogery\_id = %s"

elif choice == '5':

id = input("enter the user's id please: ")

query = "DELETE FROM users WHERE user\_id = %s"

elif choice == '6':

id = input("enter the serial number of the book's issue: ")

query = "DELETE FROM issued\_book where serial\_no = %s"

else:

print("Invalid choice.")

print()

return

data = (id,)

delete\_data(query, data)

print("Data deleted successfully.")

print()

def retrieve\_menu():

‘’’retrieval function for the retrieval of data from the database.

print("Retrieve Data from:")

print("1. Author")

print("2. Admins")

print("3. Books")

print("4. catogery")

print("5. users")

print("6. issued\_book")

print()

choice = input("Enter your choice (1/2/3/4/5/6): ")

print()

if choice == '1':

query = "SELECT \* FROM author"

elif choice == '2':

query = "SELECT \* FROM admins"

elif choice == '3':

query = "SELECT \* FROM books"

elif choice == '4':

query = "select \*from catogery"

elif choice == '5':

query = "select \*from users"

elif choice == '6':

query = "select \*from issued\_book"

else:

print("Invalid choice.")

print()

return

results = fetch\_data(query)

display\_results(results)

if \_\_name\_\_ == "\_\_main\_\_":

main\_menu()