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GOPI BIRLA MEMORIAL SCHOOL

Department of Computer Science

Certificate

This is to certify that the Computer Science Journal has been submitted by the candidate Ashutosh Pawar with Seat number 15609856 for Std XII practical examination of the Central Board of Secondary Education in the year 2024-2025.

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Date: 11/04/24

Aim: A Python code to display me in hr, min and sec

Source Code:

```
hr=r=m=sec=0  
t=int(input("Enter the desired time in seconds: "))  
hr=t//3600  
r=t%3600  
m=r//60  
sec=r%60  
print(hr,"Hour")  
print(m,"Minute")  
print("and",sec,"Seconds")
```

Output:

Enter the desired time in seconds: 26369

7 Hour

19 Minute

and 29 Seconds

Conclusion: The program was successfully executed..

Date: 11/04/24

Aim: A Python code to calculate and display mean, median and mode

Source Code:

```
import statistics  
  
mean=statistics.mean([89, 91, 96, 94, 96, 88, 91, 92, 95, 99, 91, 97,  
91])  
  
median=statistics.median([89, 91, 96, 94, 96, 88, 91, 92, 95, 99, 91,  
97, 91])  
  
mode=statistics.mode([89, 91, 96, 94, 96, 88, 91, 92, 95, 99, 91, 97,  
91])  
  
print("Mean:", mean)  
print("Median:", median)  
print("Mode:", mode)
```

Output:

Mean: 3.07692307692308

Median: 92

Mode: 91

Conclusion: The program was successfully executed..

Date: 11/4/24

Aim: To display the first ten terms of the series

Source Code:

```
print("The first ten terms of the series are:")
for i in range(1, 11):
    k=i*i+1
    print(k, end=' ')
```

Output:

The first ten terms of the series:

2 5 10 17 26 37 50 65 82 101

Conclusion: The program was successfully executed..

Date: 18/4/24

Aim: to check if the entered number is Armstrong or not.

Source Code:

```
n=int(input("Enter a number to check if it is an Armstrong number:"))
sum=0
while(n>0):
    ans=n%10
    sum+=ans*ans*ans
    n=int(n/10)
if sum==n:
    print("It is an Armstrong Number")
else:
    print("Not an Armstrong Number")
```

Output:

Enter a number to check if it is an Armstrong number: 420

It is an Armstrong Number

Conclusion: The program was successfully executed..

Date: 18/04/24

Aim: to calculate the perimeter of the right-angled triangle

Source Code:

```
import math  
pr=int(input("Enter the perpendicular of a triangle:"))  
b=int(input("Enter the base of a triangle:"))  
hypo=math.sqrt(pr*pr+b*b)  
perimtr=pr+b+hypo  
print("Hypotenuse =",hypo)  
print("Perimeter of triangle =",perimtr)
```

Output:

Enter the perpendicular of a triangle:4

Enter the base of a triangle:3

Hypotenuse = 5.0

Perimeter of triangle = 12.0

Conclusion: The program was successfully executed..

Date: 25/4/24

Aim: to enter the string and check if it's palindrome or not

Source Code:

```
a=input("Enter any string : ")  
nl=a[::-1]  
if a==nl:  
    print ("Given string is a palindrome")  
else:  
    print ("Given string is not a palindrome")
```

Output:

Enter any string: abcba

Given string is a palindrome

Conclusion: The program was successfully executed.

Date: 25/4/24

Aim: A Python code to display the value of Sine 45° and Cosine 60°

Source Code:

```
import math  
a=45; b=60  
x=22/(7*180)*a  
y= 22/(7*180)*b  
sin= math.sin(x)  
cos= math.cos(y)  
print("The value of Sine 45 degree =",sin)  
print("The value of Cosine 60 degree =",cos)
```

Output:

The value of Sine 45 degree =0.7073302780849811

The value of Cosine 60 degree =0.4996349289865546

Conclusion: The program was successfully executed.

Date: 11/7/24

Aim: display the smallest digit of a number

Source Code:

```
n=int(input("Enter a number:"))

nst=str(n)

n=0

for i in nst:

    n=int(i)

    if int(i)<n:

        n=i

    else:

        continue

print("The smallest digit in the number is: ",n)
```

Output:

Enter a number:1212540

The smallest digit in the number is: 0

Conclusion: The program was successfully executed.

Date: 11/7/24

Aim: to calculate the difference between compound interest and simple interest

Source Code:

```
r1=6
```

```
r2=8
```

```
r3=10
```

```
p=int(input("Enter principal value:"))  
amt=p*(1+r1/100)*(1+r2/100)*(1+r3/100)  
ci=amt-p  
print("Amount =",amt)  
print("Compound interest =",ci)
```

Output:

Enter principal value:151436

Amount = 190700.32608000003

Compound interest = 39264.32608000003

Conclusion: The program was successfully executed.

Date: 18/7/24

Aim: Display the next prime number

Source Code:

```
n=int(input("Enter a number: "))

c=c1=m=0

for i in range(1, n+1):

    if(n%i==0):

        c=c+1

    if(c==2):

        print(n, "is a prime number")

    else:

        a=n

        m=n

        while(c1!=2):

            a=a+1

            c1=0

            for p in range(1, a+1):

                if(a%p==0):

                    c1=c1+1

        print("The next prime number to ", m, " is ",a)
```

Output:

enter a number: 27

The next prime number to 27 is 29

Conclusion: The program was successfully executed.

Date: 18/7/24

Aim: to check a perfect number or automorphic number

Source Code:

```
p=c=k=s=0
print("Choose and type one of the following choices:
1.to check a perfect number
2.to check an automorphic number")
ch=int(input("enter your choice: "))
if(ch==1):
    n=int(input("enter a number: "))
    for i in range(1, n):
        if(n%i==0):
            s=s+i
    if(s==n):
        print(n, "is a perfect number")
    else:
        print(n, "is not a Perfect Number")
elif(ch==2):
    m=int(input("enter a number"))
    ml=m
    p=m*m
    while(m!=0):
        m=m//10
        c=c+1
```

```
k=int(math.pow(10,c))  
a=p%k  
if(a==m1):  
    print("m1, is an automorphic number")  
else:  
    print(m1,"is not an automorphic number")  
else:  
    print("Wrong choice!")
```

Output:

Choose and type one of the following choices:

- 1.to check a perfect number
- 2.to check an automorphic number

enter your choice: 1

enter a number: 7

7 is not a Perfect Number

Conclusion: The program was successfully executed.

Date: 18/7/24

Aim: To check a happy number

Source Code:

```
s=d=0
n=int(input("Enter a number:"))

s=n
while(s>9):
    n=s
    s=0
    while(n>0):
        d=n%10
        s=s+d*d
        n=n//10
    if(s==1):
        print("it is a happy number")
    else:
        print("it is not a happy number")
```

Output:

Enter a number:31

it is a happy number

Conclusion: The program was successfully executed.

Date: 25/7/24

Aim: to illustrate break statement

Source Code:

```
n=int(input("enter a number:"))

print("the digits are:")

while(n>0):

    d=n%10

    print(d)

    if d==0:

        print("zero encounters and the code terminates")

        break

    n=n//10
```

Output:

enter a number:40583

the digits are:

3

8

5

0

zero encounters and the code terminates

Conclusion: The program was successfully executed.

Date: 25/7/24

Aim: To display a pattern

Source Code:

```
p=7  
print("the pattern:")  
for i in range(1,6):  
    for j in range(9,p,-2):  
        print(j,end=' ')  
    print()  
    p=p-2
```

Output:

The pattern:

```
9  
9 7  
9 7 5  
9 7 5 3  
9 7 5 3 1
```

Conclusion: The program was successfully executed.

Date: 25/7/24

Aim: To display another type of pattern

Source Code:

```
p=1  
print("the pattern:")  
for i in range(1,6):  
    for j in range(1,i+1):  
        print(p,end=' ')  
    p=p+1  
    print()
```

Output:

the pattern:

```
1  
2 3  
4 5 6  
7 8 9 10  
11 12 13 14 15
```

Conclusion: The program was successfully executed.

Date: 08/8/24

Aim: menu-driven program to push, pop, peek and display elements

```
a=[]
```

```
def push(a):
```

```
    value=int(input("Enter element to push:"))
```

```
    a.append(value)
```

```
    print("element pushed successfully")
```

```
def popelement(a):
```

```
    x=a.pop()
```

```
    print("popped element=",x)
```

```
def peek(a):
```

```
    print("element at the top=",a[-1])
```

```
def display(a):
```

```
    for i in range(len(a)-1,-1,-1):
```

```
        print(a[i])
```

```
while True:
```

```
    ch=int(input("Choose an option from the following:"))
```

```
    1)push
```

```
    2)pop
```

```
    3)peek
```

```
    4)display:))
```

```
    if ch==1:
```

```
        push(a)
```

```
    elif ch==2:
```

```
        if len(a)==0:
```

```
    print("stack overflow")
else:
    popelement(a)
elif ch==3:
    if len(a)==0:
        print("stack overflow")
    else:
        peek(a)
elif ch==4:
    if len(a)==0:
        print("stack overflow")
    else:
        display(a)
elif ch==5:
    break
else:
    print("invalid input")
```

Output:

Choose an option from the following:

- 1)push
- 2)pop
- 3)peek
- 4)display:1

Enter element to push:2

element pushed successfully

Choose an option from the following:

- 1)push
- 2)pop
- 3)peek
- 4)display:1

Enter element to push3

element pushed successfully

Choose an option from the following:

- 1)push
- 2)pop
- 3)peek
- 4)display:1

Enter element to push4

element pushed successfully

Choose an option from the following:

- 1)push
- 2)pop
- 3)peek
- 4)display:1

Enter element to push5

element pushed successfully

Choose an option from the following:

- 1)push

- 2)pop
- 3)peek
- 4)display:4

5

4

3

2

Choose an option from the following:

- 1)push
- 2)pop
- 3)peek
- 4)display:2

popped element= 5

Choose an option from the following:

- 1)push
- 2)pop
- 3)peek
- 4)display:3

element at the top= 4

Conclusion: The program was successfully executed.

Date: 22/8/24

Aim: To write records in a CSV file

Source Code:

```
import csv  
with open("Holiday.csv","w",newline="")as fobj:  
    f=csv.writer(fobj)  
    f.writerow(['ROLL','NAME','MARKS'])  
    while True:  
        roll=int(input("enter roll no:"))  
        name=input("enter name:")  
        marks=int(input("enter marks:"))  
        data=[roll,name,marks]  
        f.writerow(data)  
        ch=int(input("1 enter more\n2 exit\nenter your choice"))  
        if ch==2:  
            break  
    print("file created successfully")
```

Output:

enter roll no:1

enter name:mark

enter marks:97

1 enter more

2 exit

enter your choice1

enter roll no:2

enter name:george

enter marks:98

1 enter more

2 exit

enter your choice1

enter roll no:3

enter name:faraday

enter marks:99

1 enter more

2 exit

enter your choice2

file created successfully

Conclusion: the file was successfully created

Date: 19/9/24

Aim: to create a database in python

Source Code:

```
import mysql.connector as c  
con=c.connect(host='localhost',  
user='root',  
password='1234')  
cur=con.cursor()  
cur.execute('create database if not exists comp24')  
con.commit()  
print("Database created successfully")
```

Output:

Database created successfully

Conclusion: database created successfully.

```

Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 12
Server version: 8.0.39 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database school24;
Query OK, 1 row affected (0.07 sec)

mysql> use school24;
Database changed

mysql> create table employee(
    -> code integer primary key,
    -> name varchar(30) NOT NULL,
    -> desig varchar(30) NOT NULL,
    -> salary decimal check(salary>10000),
    -> doj date,
    -> state varchar(30),
    -> mob char(10) unique key,
    -> gender char default 'M'
    -> );
Query OK, 0 rows affected (0.16 sec)

mysql> show tables;
+-----+
| Tables_in_school24 |
+-----+
| employee |
+-----+
1 row in set (0.03 sec)

mysql> desc employee;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| code | int | NO | PRI | NULL |       |
| name | varchar(30) | NO |       | NULL |       |
| desig | varchar(30) | NO |       | NULL |       |
| salary | decimal(10,0) | YES |       | NULL |       |
| doj | date | YES |       | NULL |       |
| state | varchar(30) | YES |       | NULL |       |
| mob | char(10) | YES | UNI | NULL |       |
| gender | char(1) | YES |       | M |       |
+-----+-----+-----+-----+-----+-----+
8 rows in set (0.03 sec)

mysql> select * from employee;
Empty set (0.01 sec)

mysql> insert into employee values(101,'Sourish','Manager',50000,'2022-10-11',
,'Karnataka','12345','M');
Query OK, 1 row affected (0.02 sec)

mysql> insert into employee values(102,'Kosha','Asst Manager',45000,'2020-06-09','Chhattisgarh','12355','F');
Query OK, 1 row affected (0.01 sec)

mysql> insert into employee values(103,'Sameer','Clerk',45000,'2021-06-09',
,Punjab','12455','M');
Query OK, 1 row affected (0.01 sec)

mysql> select * from employee;
+-----+-----+-----+-----+-----+-----+-----+
| code | name | desig | salary | doj | state | mob |
+-----+-----+-----+-----+-----+-----+-----+
| 101 | Sourish | Manager | 50000 | 2022-10-11 | Karnataka | 12345 | M |
| 102 | Kosha | Asst Manager | 45000 | 2020-06-09 | Chhattisgarh | 12355 | F |
| 103 | Sameer | Clerk | 45000 | 2021-06-09 | Punjab | 12455 | M |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> insert into employee values(104,'Rahul','Clerk',44000,'2023-06-09','T
amili Nadu','17455','M');

mysql> select * from employee;
Empty set (0.01 sec)

mysql> insert into employee values(101,'Sourish','Manager',50000,'2022-10-11
,'Karnataka','12345','M');
Query OK, 1 row affected (0.02 sec)

mysql> insert into employee values(102,'Kosha','Asst Manager',45000,'2020-06-09','Chhattisgarh','12355','F');
Query OK, 1 row affected (0.01 sec)

mysql> insert into employee values(103,'Sameer','Clerk',45000,'2021-06-09',
,Punjab','12455','M');
Query OK, 1 row affected (0.01 sec)

mysql> select * from employee;
+-----+-----+-----+-----+-----+-----+-----+
| code | name | desig | salary | doj | state | mob |
+-----+-----+-----+-----+-----+-----+-----+
| 101 | Sourish | Manager | 50000 | 2022-10-11 | Karnataka | 12345 | M |
| 102 | Kosha | Asst Manager | 45000 | 2020-06-09 | Chhattisgarh | 12355 | F |
| 103 | Sameer | Clerk | 45000 | 2021-06-09 | Punjab | 12455 | M |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> insert into employee values(104,'Rahul','Clerk',44000,'2023-06-09','T
amil Nadu','17455','M');
Query OK, 1 row affected (0.01 sec)

mysql> select code,name,salary from employee;
+-----+-----+-----+
| code | name | salary |
+-----+-----+-----+
| 101 | Sourish | 50000 |
| 102 | Kosha | 45000 |
| 103 | Sameer | 45000 |
| 104 | Rahul | 44000 |
+-----+-----+-----+
4 rows in set (0.00 sec)

```

```

mysql> select * from employee where code=103;
+---+---+---+---+---+---+
| code | name | desig | salary | doj | state | mob | gender |
+---+---+---+---+---+---+
| 103 | Sameer | Clerk | 45000 | 2021-06-09 | Punjab | 12455 | M |
+---+---+---+---+---+---+
1 row in set (0.01 sec)

mysql> select * from employee where desig='clerk';
+---+---+---+---+---+---+
| code | name | desig | salary | doj | state | mob | gender |
+---+---+---+---+---+---+
| 103 | Sameer | Clerk | 45000 | 2021-06-09 | Punjab | 12455 | M |
| 104 | Rahul | Clerk | 40000 | 2023-06-09 | Tamil Nadu | 17455 | M |
+---+---+---+---+---+---+
2 rows in set (0.00 sec)

mysql> insert into employee values(105,'Sachin','MTS',43000,'2023-07-09','Madhya Pradesh','18455','M');
Query OK, 1 row affected (0.02 sec)

mysql> insert into employee values(106,'Faraday','MTS',42000,'2021-09-09','Maharashtra','11455','M');
Query OK, 1 row affected (0.01 sec)

mysql> select * from employee;
+---+---+---+---+---+---+
| code | name | desig | salary | doj | state | mob | gender |
+---+---+---+---+---+---+
| 101 | Sourish | Manager | 50000 | 2022-10-11 | Karnataka | 12345 | M |
| 102 | Kosha | Asst Manager | 45000 | 2020-06-09 | Chhattisgarh | 12355 | F |
| 103 | Sameer | Clerk | 45000 | 2021-06-09 | Punjab | 12455 | M |
| 104 | Rahul | Clerk | 40000 | 2023-06-09 | Tamil Nadu | 17455 | M |
| 105 | Sachin | MTS | 43000 | 2023-07-09 | Madhya Pradesh | 18455 | M |
| 106 | Faraday | MTS | 42000 | 2021-09-09 | Maharashtra | 11455 | M |
+---+---+---+---+---+---+
6 rows in set (0.00 sec)

mysql> select * from employee where salary=45000 and design='clerk';
+---+---+---+---+---+---+
| code | name | desig | salary | doj | state | mob | gender |
+---+---+---+---+---+---+
| 103 | Sameer | Clerk | 45000 | 2021-06-09 | Punjab | 12455 | M |
+---+---+---+---+---+---+
1 row in set (0.01 sec)

mysql> select * from employee where name like='Sa%';
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 'Sa%' at line 1
mysql> select * from employee where name like='Sa%';
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 'Sa%' at line 1
mysql> select * from employee where name like='sa%';
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 'sa%' at line 1
mysql> select * from employee where name like '%sa%';
+---+---+---+---+---+---+
| code | name | desig | salary | doj | state | mob | gender |
+---+---+---+---+---+---+
| 103 | Sameer | Clerk | 45000 | 2021-06-09 | Punjab | 12455 | M |
| 105 | Sachin | MTS | 43000 | 2023-07-09 | Madhya Pradesh | 18455 | M |
+---+---+---+---+---+---+
2 rows in set (0.04 sec)

mysql> update employee set state='Telengana' where code=103;
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> select * from employee;
+---+---+---+---+---+---+
| code | name | desig | salary | doj | state | mob | gender |
+---+---+---+---+---+---+
| 101 | Sourish | Manager | 50000 | 2022-10-11 | Karnataka | 12345 | M |
| 102 | Kosha | Asst Manager | 45000 | 2020-06-09 | Chhattisgarh | 12355 | F |
| 103 | Sameer | Clerk | 45000 | 2021-06-09 | Telengana | 12455 | M |
| 104 | Rahul | Clerk | 40000 | 2023-06-09 | Tamil Nadu | 17455 | M |
| 105 | Sachin | MTS | 43000 | 2023-07-09 | Madhya Pradesh | 18455 | M |
| 106 | Faraday | MTS | 42000 | 2021-09-09 | Maharashtra | 11455 | M |
+---+---+---+---+---+---+
6 rows in set (0.00 sec)

mysql>

```

Date: 03/10/24

Aim: to connect python with mysql

Source Code:

```
import mysql.connector as c  
con=c.connect(host='localhost',  
               user='root',  
               password='ashu@105',  
               database='pracs')  
if con.is_connected():  
    print("Successfully connected")
```

Output:

Successfully connected

Conclusion: MySQL was successfully connected with python.

Date: 03/10/24

Aim: To make a menu-driven program for the table of MySQL created, in python.

Source Code:

SQL:

```
CREATE DATABASE library;  
USE library;  
CREATE TABLE books (  
    id INT AUTO_INCREMENT PRIMARY KEY,  
    title VARCHAR(255),  
    author VARCHAR(255),  
    year INT  
);
```

Python:

```
import mysql.connector  
  
def connect_to_db():  
    return mysql.connector.connect(  
        host="localhost",  
        user="root",  
        password="ashu@105",  
        database="librarypracs")  
  
  
def view_records(cursor):  
    cursor.execute("SELECT * FROM books")
```

```
rows = cursor.fetchall()
print("\n--- Books Table ---")
for row in rows:
    print(f"ID: {row[0]}, Title: {row[1]}, Author: {row[2]}, Year: {row[3]}")
print()

def insert_record(cursor, connection):
    title = input("Enter the book title: ")
    author = input("Enter the book author: ")
    year = int(input("Enter the publication year: "))
    query = "INSERT INTO books (title, author, year) VALUES (%s, %s, %s)"
    cursor.execute(query, (title, author, year))
    connection.commit()
    print("Record inserted successfully!\n")

def update_record(cursor, connection):
    book_id = int(input("Enter the ID of the book to update: "))
    new_title = input("Enter the new title: ")
    new_author = input("Enter the new author: ")
    new_year = int(input("Enter the new publication year: "))
    query = "UPDATE books SET title = %s, author = %s, year = %s WHERE id = %s"
    cursor.execute(query, (new_title, new_author, new_year, book_id))
    connection.commit()
```

```
print("Record updated successfully!\n")

def delete_record(cursor, connection):
    book_id = int(input("Enter the ID of the book to delete: "))
    query = "DELETE FROM books WHERE id = %s"
    cursor.execute(query, (book_id,))
    connection.commit()
    print("Record deleted successfully!")

def main_menu():
    connection = connect_to_db()
    cursor = connection.cursor()

    while True:
        print("Menu:")
        print("1. View Records")
        print("2. Insert Record")
        print("3. Update Record")
        print("4. Delete Record")
        print("5. Exit")

        choice = input("Enter your choice (1-5): ")

        if choice == "1":
            view_records(cursor)
```

```
elif choice == "2":  
    insert_record(cursor, connection)  
elif choice == "3":  
    update_record(cursor, connection)  
elif choice == "4":  
    delete_record(cursor, connection)  
elif choice == "5":  
    print("Exiting program. Goodbye!")  
    break  
else:  
    print("Invalid choice. Please try again.\n")  
  
cursor.close()  
connection.close()
```

Output:

Menu:

1. View Records
2. Insert Record
3. Update Record
4. Delete Record
5. Exit

Enter your choice (1-5): 1

--- Books Table ---

(No records found)

Menu:

1. View Records
2. Insert Record
3. Update Record
4. Delete Record
5. Exit

Enter your choice (1-5): 2

Enter the book title: The Great Gatsby

Enter the book author: F. Scott Fitzgerald

Enter the publication year: 1925

Record inserted successfully!

Menu:

1. View Records
2. Insert Record
3. Update Record
4. Delete Record
5. Exit

Enter your choice (1-5): 1

--- Books Table ---

ID: 1, Title: The Great Gatsby, Author: F. Scott Fitzgerald, Year: 1925

Menu:

1. View Records
2. Insert Record
3. Update Record
4. Delete Record
5. Exit

Enter your choice (1-5): 3

Enter the ID of the book to update: 1

Enter the new title: The Great Gatsby (Updated)

Enter the new author: F. Scott Fitzgerald

Enter the new publication year: 1926

Record updated successfully!

Menu:

1. View Records
2. Insert Record
3. Update Record
4. Delete Record
5. Exit

Enter your choice (1-5): 1

--- Books Table ---

ID: 1, Title: The Great Gatsby (Updated), Author: F. Scott Fitzgerald,
Year: 1926

Menu:

1. View Records
2. Insert Record
3. Update Record
4. Delete Record
5. Exit

Enter your choice (1-5): 4

Enter the ID of the book to delete: 1

Record deleted successfully!

Menu:

1. View Records
2. Insert Record
3. Update Record
4. Delete Record
5. Exit

Enter your choice (1-5): 1

--- Books Table ---

(No records found)

Menu:

1. View Records
2. Insert Record
3. Update Record
4. Delete Record
5. Exit

Enter your choice (1-5): 5

Exiting program. Goodbye!

Conclusion: The program was successfully executed.