|  |
| --- |
| Ex no: 4 PROGRAMS FOR CONTROL STATEMENTSDATE: 07/01/2023 |

1. ARITHMETIC SERIES

AIM:

To write program for the arithmetic series

SOURCE CODE:

#Arithmetic series

a=int(input("Enter the value of a:"))

d=int(input("Enter the value of d:"))

n=int(input("Enter the value of n:"))

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

series=a+(i-1)\*d

print(series,end=" ")

OUTPUT:

Enter the value of a:1

Enter the value of d:3

Enter the value of n:10

1 4 7 10 13 16 19 22 25 28

B.TO FIND THE SUM OF THE CUBE SERIES

AIM:

To write the program for the sum of the cube series

SOURCE CODE:

#sum of the cube series

n=int(input("Enter the value of n:"))

i=1

sum=0

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

sum=sum+(i\*\*3)

print("Sum of the series:",sum)

OUTPUT:

Enter the value of n:10

Sum of the series: 3025

2. PYRAMID PATTERNS

A.TO PRINT THE HALF PYRAMID PATTERN OF NUMBERS

AIM:

To write the program for printing the half pyramid pattern of numbers.

SOURCE CODE:

#Half pyramid pattern for numbers

n=int(input("Enter the value of n:"))

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

print()

for j in range(i):

print(j+1,end=" ")

OUTPUT:

Enter the value of n:5

1

1 2

1 2 3

1 2 3 4

1 2 3 4 5

B.TO PRINT DOWNWARD HALF PYRAMID PATTERN OF STARS(\*)

AIM:

To write the program for printing the downward half pyramid pattern of stars.

SOURCE CODE:

#Downward half pyramid pattern of star

n=int(input("Enter the value of n:"))

for i in range(n,0,-1):

print()

for j in range(i):

print("\*",end=" ")

OUTPUT:

Enter the value of n:5

\* \* \* \* \*

\* \* \* \*

\* \* \*

\* \*

\*

3. CONVERSION OF BINARY VALUE INTO DECIMAL VALUE

AIM:

To write the program for converting the binary value into decimal value.

SOURCE CODE:

#Bin to dec

bin=int(input("Enter the binary value:"))

i=0

sum=0

while (bin>0):

rem=bin%10

sum=sum+rem\*(2\*\*i)

i=i+1

bin=bin//1

0

print("Decimal value: ",sum)

OUTPUT:

Enter the binary value:1010

Decimal value: 10

RESULT:

Thus the program is executed and the output is verified successfully.