**Ex.No:6**

**Date:**

**IMPLEMENTATION OF IMPERATIVE PROGRAMMING PROGRAM**

**AIM:**

To Write a Python Programs to implement imperative programming paradigm

6a. Write a program to find sum of n numbers

**ALGORITHM 1:**

● Start the program

● Create the list

● Initialize the sum variable to 0

● Find sum for the numbers in listxxa

● Print the sum

● Stop

**PROGRAM1 :**

my\_list = [1, 2, 3, 4, 5]

sum = 0

for x in my\_list:

sum += x

print(sum)

**OUTPUT 1:**

15

6b. Write a program to get a list of characters and concatenate it to form a string

**ALGORITHM :**

● Start the program

● Initialize the set of characters

● Get the character one by one and conatenate

● Stop

**PROGRAM :**

sample\_characters = ['p','y','t','h','o','n']

sample\_string = ‘ ‘

sample\_string‘ ‘

sample\_string = sample\_string + sample\_characters[0]

sample\_string 'p'

sample\_string = sample\_string + sample\_characters[1]

sample\_string 'py'

sample\_string = sample\_string + sample\_characters[2]

sample\_string 'pyt'

sample\_string = sample\_string + sample\_characters[3]

sample\_string 'pyth'

sample\_string = sample\_string + sample\_characters[4]

sample\_string 'pytho'

sample\_string = sample\_string + sample\_characters[5]

sample\_string 'python'

**OUTPUT 1 :**

'python'

6c. Write a program to get a characters ‘welcome’ and to display

**ALGORITHM 2 :**

● Start the program

● Initialize the characters in ‘welcome’

● Get each string one by one and concatenate each one using for loop

● Print the each character of welcome one by one.

● Stop

**PROGRAM 2 :**

sample\_characters = ['w','e','l','c','o','m',’e’]

sample\_string = ''

sample\_string

for c in sample\_characters:

sample\_string = sample\_string + c

print(sample\_string)

**OUTPUT 2 :**

w

we

wel

welc

welco

welcom

welcome

6d.Write a program to iterate between 10 to 20 and to find factor and to display prime number

**ALGORITHM 3 :**

● Start the program

● Get the numbers between 10 and 20

● Find the factor of a number

● Display the prime number

● Stop

**PROGRAM 3:**

for num in range(10,20):

for i in range(2,num):

if num%i == 0:

j=num/i

print(num,i,j)

else:

print(num, "is a prime number")

**OUTPUT 3:**

10 2 5.0

10 5 2.0

10 is a prime number

11 is a prime number

12 2 6.0

12 3 4.0

12 4 3.0

12 6 2.0

12 is a prime number

13 is a prime number

14 2 7.0

14 7 2.0

14 is a prime number

15 3 5.0

15 5 3.0

15 is a prime number

16 2 8.0

16 4 4.0

16 8 2.0

16 is a prime number

17 is a prime number

18 2 9.0

18 3 6.0

18 6 3.0

18 9 2.0

18 is a prime number

19 is a prime number

**RESULT:**

Thus the Python program to implement to find sum of n numbers, to get a list of

characters and concatenate it to form a string, to get a characters ‘welcome’ and to display and

to iterate between 10 to 20 to display prime number have been executed successfully.