 INDIAN SCHOOL AL WADI AL KABIR

|  |  |  |
| --- | --- | --- |
| **Class: XI**  | **Department: Computer Science** | **Date of submission:5/09/2023** |
| **Worksheet No: 5** | **Topic: Iterative Constructs in Python** | **Note: Solve in the lab** |

**Section A**

1. Rewrite the following Python code after removing all syntax errors. Underline each correction done in the code.

Num = int (“Enter any Number: “)

Sum = 0

for I in range (10, Num, 3)

Sum+=i

if i%2==0:

print i\*2

Else:

print i\*3

1. How many time(s) the following loop will execute?

for x in range(-300, 300, 100):

print(x, end=” ”)

1. How many time(s) the following loop will execute?

for A in [15, 30, 50, 100]:

print(A,” % ”)

1. How many time(s) the following loop will execute?

for K in range(10):

print(K, end=”@”)

print(K\*2, end=”\n”)

1. Predict the output of the following code fragments:
2. for K in range(11,15):

print(K)

1. for J in range(10):

print(J, end=” ”)

1. for I in range(5, 20, 3):

print(I, end=” \t”)

1. for K in range(200, 100, -30):

print(K, end=”\n”)

1. for J in range(50, 100, 15):

print(J\*2, end=”\*”)

 else:

 print(“Loop Ends…”)

1. How many time(s) the following loop will execute?

i) for J in range(101,125):

if J % 7 == 0 :

print(J)

 ii) i=10

 while i <50:

 print(“Hello”)

 i=i+5

**Section B**

1. Write a program to find factorial value of the given number.

**num=5**

**fact=1**

**for i in range(num):**

 **fact=fact\*(i+1)**

**print("Factorial=",fact)**

1. Write a program to print the multiplication table of any number given by a user.

num = int(input("Enter the number : "))

**i = 1**

**print("Multiplication Table : ")**

**while i<=10:**

 **num = num \* 1**

 **print(num,'x',i,'=',num\*i)**

 **i += 1**

1. Write a program to display the factors of a number.

**num=int(input("Enter the number:"))**

**for i in range(1,num+1):**

 **if num%i==0:**

 **print(i)**

1. Write a program to find the sum of even numbers and odd numbers from 100 to 500 using for loop.

**even=0**

**odd=0**

**i=100**

**for i in range(501):**

 **if i%2==0:**

 **even=even+i**

 **else:**

 **odd=odd+i**

**print("Sum of even numbers:",even)**

**print("Sum of odd numbers:", odd)**

1. Write a program to find the sum of digits of a number entered by user.

**s=0**

**n=int(input("enter a number"))**

**while n!=0:**

 **s=s+(n%10)**

 **n=n//10**

**print("sum of digits is:",s)**

1. Write a program to reverse the digits of a number entered by user and display.

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

**rev=0**

**while n>0:**

 **rem=n%10**

 **rev=rev\*10+rem**

 **n//= 10**

**print("Reversed number: ", rev)**

1. Write a program to count the number of values divisible by 3 in the range 20-50.

**c=0**

**for i in range(20,51):**

 **if i%3==0:**

 **c=c+1**

**print("Number of digits divisible by 3 :",c)**

1. Write a program to display the number of values divisible by 5 in the range 101-500.

**c=0**

**for i in range(100,501):**

 **if i%5==0:**

 **c=c+1**

**print("Numbers divisible by 5 :",c)**

1. Write a program to display all the values divisible by 8 in the range 200-500 using while loop.

**i=200**

**while i<=500:**

 **if i%8==0:**

 **print(i,end=' ')**

 **i=i+1**

1. Write a program to check whether a number entered by user is palindrome or not.

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

**rev=0**

**org=n**

**while n>0:**

 **rem=n%10**

 **rev=rev\*10+rem**

 **n//= 10**

**print("Reversed number: ", rev)**

**if org==rev:**

 **print("it is palindrome")**

**else:**

 **print("it is not a palindrome")**