**Day 3 python programming**

**1.least and most significant digit**

def most\_and\_least\_significant\_digit(number):

number = abs(number)

number\_str = str(number)

most\_significant\_digit = number\_str[0]

least\_significant\_digit = number\_str[-1]

return most\_significant\_digit, least\_significant\_digit

number = 1.2378

most\_digit, least\_digit = most\_and\_least\_significant\_digit(number)

print(f"Most Significant Digit: {most\_digit}")

print(f"Least Significant Digit: {least\_digit}")

**output:**1

8

**2.multiplication table**

num=6

for i in range(1,11)

Print(num,”x”,i,”=“,num\*i)

**Output:**6x1=6

6x1=6

6x2=12

6x3=18

6x4=24

6x5=30

6x6=36

6x7=42

6x8=48

6x9=54

6x10=60

**3.simple interest-default argument**

Def simple\_interest(p,r=5,t=1):

Si=(p\*r\*t)/100

Return si

Print(“the simple interest is”,simple\_interest(p,r=5,t=1))

**Output:**the simple interest is 500.0

**4.diagonal elements-sum**

Import numpy as np

a=[[10,2,3],[4,5,6],[7,8,9]]

b=np.asarray(a)

print(“diagonal (sum): “,np.trace(b))

print(“diagonal(elements): “,np.diagonal(b))

**output:**diagonal(sum)=27

diagonal(elements0=[10,5,12]

**5.decimal to binary and binary to decimal**

decimal=20

binary=format(decimal,”b”)

Print(binary)

binary=”10100”

decimal=int(binary,2)

Print(decimal)

**Output:**10100

20

**6.first and second largest element**

List\_value=[20,30,40,25,10]

List\_val.sort()

Print(“the first largest element : “,list\_value[n])

Print(“the second largest element : “,list\_value[n-1])

**Output:** 40

30

**7.vowels and consonanats**

Str1=”Sirisha”

Vowels=0

Consonants=0

for i in str1:

If(i==”a” or i==”e” or i==”i” or i==”o” or i==”u”

Or i==”A” or i==”E” or i==”I” or i==”O” or i==”U”):

Vowels=vowels+1

Else:

Consonants=Consonants+1

Print(“total number of vowels: “,vowels)

Print(“total number of consonants: “,consonants)

**Output:** total number of vowels:3

total number of consonants:4

**8.merged two array**

arr1=[1,2,3]

arr2=[4,5,6]

merged\_array=arr1+arr2

print(merged\_array)

**output:[**1,2,3,4,5,6]

**9.Insert the elments**

My\_list=[1,2,3,4]

My\_list.insert(3,10)

Print(my\_list)

**Output:**[1,2,3,10,4]

**10.maximum and minimum**

arr=[12,45,2,99,10]

Print(“maximum: “,max(arr))

Print(“minimum: “,min(arr))

**Output:** maximum:99

minimum:2