**Day – 3**

**1. Least significant and most significant:**

def find\_significant\_digits(n):

n\_str=str(n).replace(‘.’ , ‘ ‘).replace(‘-’ , ‘ ‘)

most\_significant=int(n\_str[0])

least\_significant=int(n\_str[-1])

return most\_significant,least\_significant

n=1.2378

most\_significant,least\_significant= find\_significant\_digits(n)

print(“most significant: “ , most\_significant)

print(“least significant: “ , least significant)

**Output: most significant: 1**

**Least significant: 8**

**2.Multiplication Table:**

num=10

for i in range(1, 11):

print(num, ‘x’ , i , ‘=’, num\*i)

**Output:**

**10\*1=10**

**10\*2=20**

**10\*3=30**

**10\*4=40**

**10\*5=50**

**10\*6=60**

**10\*7=70**

**10\*8=80**

**10\*9=90**

**10\*10=100**

**3.Simple interest by default argument:**

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

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

p=1000

print(“The simple interest is: “ , simple\_interest(p, r=5, t=1))

**Output: The simple interest is: 50.0**

**4.Diagonal elements and it’s sum:**

import numpy as np

a=[[10,2,3], [4,5,6], [10,8,12]]

b=np.asarray(a)

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

print(“Diagonal(sum): “, np.trace(b))

**Output: [10,5,12]**

**30**

**5.Convert 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**

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**6.First and second largest element in array:**

list\_val=[20,30,40,25,10]

llist\_val.sort( )

print(“The first largest is: “, list\_val[-1])

print(“The second largest is: “, list\_val[-2])

**Output: The first largest is: 40**

**The second largest is: 30**

**7.No. of vowels and consonants in a string:**

str1=”Srinidhi”

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(“vowels= “,vowels)

print(“consonants= “, consonants)

**Output: vowels=3**

**Consonants=5**

**8.Merge two arrays:**

arr1=[1,2,3]

arr2=[4,5,6]

merged\_arr=arr1+arr2

print(merged\_arr)

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

**9.Insert element at specified index:**

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

my\_list.insert(2,10)

print(my\_list)

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

**10.Minimum or maximum:**

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

print(“Minimum= “ , min(arr))

print(“Maximum= “ ,max(arr))

**Output: Minimum= 2**

**Maximum= 99**