**Python programming-CSA0814**

**DAY 3**

**(6 aug 24)**

**1.LEAST AND MOST SIGNIFICANT VALUE**

Num=12345

Least=num%10

Print(least)

b=str(num)

c=int(b[0])

print(c)

**2.MULTIPLICATON TABLE**

n=int(input())

for i in range(1,11)

print(n,”\*”,i,”=”,n\*i)

**3.SIMPLE INTEREST**

def simpleinterest(principal,time,rate=1):

return(principal\*rate\*time)/100

interest=simpleinterest(100,2)

print(interest)  
**4.PRINTING DIAGONAL MATRIX AND ITS SUM**

matrix=[[1,2,3],[4,5,6],[7,8,9]]

diagonalsum=0

for i in range(len(matrix)):

diagonalsum+=matrix[i][i]

print(diagonalsum)

**5.CONVERTING BINARY TO DECIMAL AND DECIMAL TO BINARY**

def decimaltobinary(n):

return bin(n)[2:]

def binarytodecimal(b):

return int(b,2)

while True:

choice=input(“choose:1.decimal to binary 2.binary to decimal 3.exit”)

if choice==’1’:

num=int(input(“enter decimal number”))

print(decimaltobinary(num))

elif choice==’2’:

bnum=input(“enter binary num”)

print(binarytodecimal(bnum))

elif choice==’3’:

break

else:

print(“invalid number”)

**6.FINDING FIRST LARGEST AND SECOND LARGEST NUMBER**

a=[1,2,3,4,5,6,7,8,9,10]

b=max(a)

print(“mfirst largest”,b)

a.remove(b)

print(“second largest”,max(a))

**7.COUNTING NUMBER OF VOWELS AND CONSONANTS**

def countvowelsandconsonants(word):

vowels=”aeiouAEIOU”

vowelcount=0

consonantcount=0

for char in word:

if char.isalpha():

if char in vowels:

vowelcount+=1

else:

consonantcount+=1

return vowelcount,consonantcount

inputword=input(“enter a word”)

vowels,consonants=countvowelsandconsonants(inputword)

print(inputword)

print(vowels)

print(consonants)

**8.MERGE TWO ARRAYS**

arr1=[1,2,3]

arr2=[4,5,6]

arr3=arr1+arr2

print(arr3)

**9.INSERT A ELEMENT IN A SPECIFIED INDEX**

arr1=[1,2,3,4,]

arr1.insert(2,10)

print(arr1)

**10.FIND THE MINIMUM AND MAXIMUM NUMBER OF GIVEN ARRAY**

**arr=[3,1,4,5,9,2,6,15,3,5]**

**mini=min(arr)**

**maxi=max(arr)**

**print(“minimum is”,mini)**

**print(“maximum is “.maxi)**