**Netaji Subhash Engineering College**

**Department of Computer Science & Engineering**

**B. Tech CSE 2nd Year 3rd Semester**

**2021-2022**

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**Name of the Course: IT Workshop**

**Course Code: PCC-CS393**

**Name of the Student: Sanjoy Saha**

**Class Roll No.: 3**

**University Roll No.: 10900120003**

**Date of Experiment: 10/12/2021**

**Date of Submission: 15/12/2021**

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* **Assignment No.: 33**

**Problem Statement:**   Write a program to accept a sequence of comma-separated numbers from the user and generate a tuple with those numbers

**Python Code:**

elements=input("Enter a sequence of comma-separated numbers: ").split(",")

tuple=tuple(elements)

print("Tuple: ",tuple)

**Sample Output(s):**

**Text

Description automatically generated**

* **Assignment No.: 34**

**Problem Statement:** Write a program to add elements in a tuple without using built-in functions

**Python Code:**

ele=input("Enter a sequence of elements: ").split()

tup=tuple(ele)

sum=0

for i in tup:

    sum=sum+int(i)

print("Sum: ",sum)

**Sample Output(s):**

**Text

Description automatically generated**

* **Assignment No.: 35**

**Problem Statement:** Write a program to calculate the mean of elements in a tuple of integers.

**Python Code:**

ele=input("Enter the elements of tuple: ").split()

tup=tuple(ele)

sum=0

for i in tup:

    sum=sum+int(i)

    result=sum/len(tup)

print("Mean of the numbers: ",result)

**Sample Output(s):**

**Text

Description automatically generated**

* **Assignment No.: 36**

**Problem Statement:**  Write a program to display unique and duplicate elements of a tuple.

**Python Code:**

ele=input("Enter the elements of tuple: ").split()

tup=tuple(ele)

uni=[]

dup=[]

for i in tup:

    if i in uni:

        dup.append(i)

        uni.remove(i)

    else:

        uni.append(i)

uni=tuple(uni)

dup=tuple(dup)

print("Unique elements are: ",uni)

print("Duplicate elements are: ",dup)

**OUTPUT –**

**Text

Description automatically generated**

* **Assignment No.: 37**

**Problem Statement:** Write a program to count the frequency of all the elements in a tuple.

**Python Code:**

def count(tup, x):

    count = 0

    for ele in tup:

        if (ele == x):

            count = count + 1

    return count

ele=input("Enter the elements of tuple: ").split()

tup=tuple(ele)

li=[]

for i in tup:

    if i not in li:

        li.append(i)

for i in li:

    print("Frequency of",i,"is: ",count(tup,i))

**Sample Output(s):**

**Text

Description automatically generated**

**Assignment No.: 38**

**Problem Statement:**  Write a program to find the distinct pair of numbers whose product is even from a tuple of integers

**Python Code:**

ele=input("Enter the elements of tuple: ").split()

tup=tuple(ele)

for i in range(len(tup)):

    for j in range(i+1,len(tup)):

        a=int(tup[i])

        b=int(tup[j])

        if (a\*b)%2==0:

            t=(tup[i],tup[j])

            print(t)

**Sample Output(s):**

**Text

Description automatically generated**

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