**Practical No: 9**

**Aim:** Using Dictionary: Write a program to: (i) Create dictionary, add element to dictionary, delete element from the dictionary.

**Course Outcome:** Develop ‘Python’ programs using List, Tuples and Dictionary.

**Requirements: Computer, Python 3.3.34, Vs Code.**

**Theory:**

Python dictionaries are an unordered collection of key value pairs. In this tutorial we will see how we can add new key value pairs to an already defined dictionary. Below are the two approaches which we can use.

## Assigning a new key as subscript

We add a new element to the dictionary by using a new key as a subscript and assigning it a value.

You can **use both dict.** **pop() method and a more generic del statement** to remove items from a dictionary. They both mutate the original dictionary, so you need to make a copy (see details below). Unless you use pop() to get the value of a key being removed you may provide anything, not necessary None .

**Flowchart:**

**Program:**

def AddDictElement():

    key = str(input("Enter the Key for the Subject: "))

    Marks = int(input("Enter the marks of the subjects: "))

    Dict[key]= Marks

    print("Dict: ",Dict)

def DelDictElement(Code):

    Dict.pop(Code)

    print("Dict: ", Dict)

Dict = {'LX':75, 'CC':98, 'PY': 87, 'CG':95}

Los = 0

while Los != 4:

    print("1. Add Item to Dict..")

    print("2. Delete Item From Dict..")

    print("3. Print the Dict")

    print("4. EXIT")

    Choice = int(input("Enter Your Choice 1-4: "))

    if(Choice == 1):

        AddDictElement()

    elif(Choice==2):

        CD = str(input("Enter the key of the item: "))

        DelDictElement(CD)

    elif(Choice == 3):

        print("Dict: ", Dict)

    elif(Choice == 4):

        Los = 4

    else :

        print("Enter an appropriate option: ")

**Output/Result:**

**1. Add Item to Dict..**

**2. Delete Item From Dict..**

**3. Print the Dict**

**4. EXIT**

**Enter Your Choice 1-7: 1**

**Enter the Key for the element: DJ**

**Enter the marks of the subjects: 39**

**Dict: {'LX': 75, 'CC': 98, 'PY': 87, 'CG': 95, 'DJ': 39}**

**1. Add Item to Dict..**

**2. Delete Item From Dict..**

**3. Print the Dict**

**4. EXIT**

**Enter Your Choice 1-7: 2**

**Enter the key of the item: DJ**

**Dict: {'LX': 75, 'CC': 98, 'PY': 87, 'CG': 95}**

**2. Delete Item From Dict..**

**3. Print the Dict**

**4. EXIT**

**Enter Your Choice 1-7: 3**

**Dict: {'LX': 75, 'CC': 98, 'PY': 87, 'CG': 95}**

**Conclusion: Hence we have created a dictionary , added an item to the dictionary and deleted an item to the dictionary.**