

**School of Computer Engineering and Technology**

**ASSIGNMENT NO: 5**

**Problem Statement:**

Different Operations on Dictionary and Tuple Data Structure.

**Aim:**

Write a python program to create, append and remove etc. operation on Dictionary and Tuple.

**Objectives:**

To learn and implement Dictionary and Tuple Data Structure.

**Theory:**

Write down about different operations performed on Dictionary and Tuple Data Structure.

# Platform: Windows/Ubuntu-Python Editor(jupyter notebook)

**Algorithm/Pseudo code:** Students should write algorithm/Pseudo code for the given problem statement.

**Input:** Different Dictionary and Tuple Data Structureand different operations

**Output:** DisplayDifferent operation performed on Dictionary and Tuple Data Structure

***Exercises on Dictionary and Tuple***

**Perform following exercises and upload a single file of jupyter notebook containing all exercise’s code and respective outputs.**

1. Assign 5 elements in the dictionary named my\_dict. This dictionary contains student’s information. Add and delete student information from my\_dict. Display student information
2. Convert list to dictionary

e.g. list1=[‘name’, ‘panel’,’rollno’]

list2=[‘ABC’,’B’,34]

my\_dict= { ‘name’:’ABC’, ‘panel’=’B’, ‘rollno’=34}

1. Sort the elements of the dictionary using sorted() function

my\_dict= { ‘name’:’ABC’, ‘panel’=’B’, ‘rollno’=34, ‘marks’:[65,87,67,94]}

sorted(my\_dict)

1. Convert a dictionary to lists. Make one list of keys and other of values
2. Find the mean of values of dictionary

e.g mydict= { ‘marks1’: 23, ‘marks2’: 123, ‘marks3’: 43, ‘marks4’: 13, ‘marks5’: 39)

output: mean of all values.

1. my\_dict={‘name’:[‘Yash’,’Neel’,’Dev’], ‘rollno’:[11,12,13],’marks’:[78,56,98]}

Perform following operations on above dictionary

1. Display name as Dev
2. Display 12 roll no
3. Display greatest marks
4. Calculate frequency of letters occurring in a given string.
5. Write a program which takes numerator and denominator values from the user and gives output as a tuple of Quotient and Remainder.
6. Suppose a date is represented as a tuple (d,m,y). Write a program to create two date tuples with values taken from the user and find the number of days between the two dates as an output.

**Conclusion:**

Studied python Dictionary and Tuple Data Structure.

**FAQs:**

1. What will be the output of the following code snippet?

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

print(a[::2])

1. What will be the output of the following code snippet?

l = [1, 2, 3]

init\_tuple = ('Python',) \* (l.\_\_len\_\_() - l[::-1][0])

print(init\_tuple)

1. State the difference between list and dictionary.
2. What is the benefit of using tuple assignment in Python?