## **Tuple Exercises**

- Q1. Consider the given tuple and write the output of given statements: T1 = (1, 23, 4, 5, "A", ["C", "D"], (23,45), 45)
- 1. print(len(T1))
- 2. print(T1.index(45))
- 3. print(T1.count(45))
- 4. print(T1[5][0]\*2)
- 5. print(T1[:5])
- 6. print(T1[5:])
- 7. print(T1.index("A"))
- 8. print(T1[-1:-7:-2])
- 9. print(T1[4] T1[5])
- 10. print(max(T1))
- Q2. Write a program to accept five numbers from the user and store these numbers in a tuple. Display the following from tuple:
- 1. Largest number
- 2. Smallest number
- 3. Sum of all numbers
- 4. Average of all numbers
- Q3. Write a program in python to print the second largest element in tuple given below:

$$T1 = (23, 45, 87, 45, 67, 43, 23, 12)$$

Q4. Write a program to display the sum of all the numbers in a given tuple:

Q5. Write a program to find the sum of marks of all students stored in the given tuple.

$$T1 = (("Suman", 75). ("Glory", 35), ("Ravi, 50))$$

Expected Output is: 160

Q6. Write a program to print the common elements of given tuples:

Expected Output: 3,5

Q7. Write a program to find the union (Common element include once) of given tuples:

Expected Output: 1, 2, 3, 4, 5, 6, 7, 9, 11

Q8. Write a program to store the sum of all sub tuples of given tuple into a new tuple. for example T1 = ((1, 2, 3), (45, 23), (98, 34, 67), (34, 56, 78, 9)) #Original Tuple

$$T2 = (6, 68, 199, 177)$$
# New Tuple

Q9. Write a program to store the maximum value of all sub tuples of given tuple into a new tuple. for example

$$T1 = ((1, 2, 3), (45, 23), (98, 34, 67), (34, 56, 78, 9), ("A", "B", "c"))$$
 #Original Tuple

$$T2 = (3, 45, 98, 78, c)$$
 # New Tuple

Q10. Write a program to display the longest sub tuple from the given tuple.

Q11. Write a program that inputs two tuples seq\_a and seq\_b and prints True if every element in seq\_a is also an element of seq\_b, else prints False.

Output: Enter the first tuple: 1,3,5

Enter the second tuple: 4,5,1,3

True