**AL-2001**

**Programming for AI**

**Lab # 6**

**Objectives**

**Tuple**

**Note: Carefully read the following instructions (***Each instruction contains a weightage***)**

* First think about statement problems and then write your logic on Copy / Notebook.
* Write **Your Name** and **Roll No** on your Paper/Sheet’s first page.
* Do not copy from any source otherwise you will be penalized with negative marks.
* Complete your lab **within given Time Slot**.
* Do not discuss about your assigned with any one. It will be not evaluate.
* Paste all your codes along with screenshots in a word file and renamed with your roll number.
* Keep all your source files in your computer for verification. Do not overwrite a single source file for all programs.

**[Problems/Task]**

1. Check if an element exists in a tuple. Count the occurrences of an element in a tuple.
2. Convert a list to a tuple.
3. Count the number of even and odd numbers in a tuple.
4. Write a Python program to convert a given tuple of positive integers into an integer.  
   **Original tuple:**(1, 2, 3)  
   Convert the said tuple of positive integers into an integer:  
   123  
   **Original tuple:**(10, 20, 40, 5, 70)   
   Convert the said tuple of positive integers into an integer:  
   102040570
5. [Write a program to add a dictionary to tuple](https://www.includehelp.com/python/add-a-dictionary-to-tuple.aspx?ref=rp).
6. [Write a program to check if two lists of tuples are identical or not](https://www.includehelp.com/python/check-if-two-lists-of-tuples-are-identical-or-not.aspx?ref=rp).
7. [Write a program to convert set into tuple and tuple into set](https://www.includehelp.com/python/convert-set-into-tuple-and-tuple-into-set.aspx).
8. [Write a program to change the sign of elements of tuples in a list](https://www.includehelp.com/python/change-the-sign-of-elements-of-tuples-in-a-list.aspx?ref=rp).
9. Write a [Python program to assign frequency to tuples](https://www.includehelp.com/python/assign-frequency-to-tuples.aspx).
10. Write a [code to perform AND operation on tuples](https://www.includehelp.com/python/perform-and-operation-on-tuples.aspx).

**You need to done with your exercise within given time.**