Lists and Tuples

**Topics covered under Lists**

Students were first taught how to create lists, following which they were taught about indexing and slicing of lists. They were then taught how to add, replace and remove elements from a list. They were also taught several built-in functions and methods like len(), sort(), count() etc. which further enhanced their knowledge on applications of lists. Then they were taught nesting of lists, and list iteration. Finally they were taught list comprehension.

**Topics covered under Tuples**

Students were first told the difference between tuples and list in terms of the enclosing braces. Then they were taught how to create tuples. Similarities between the two in terms of indexing, slicing and iterating were clearly pointed out. Then they were explained the main difference i.e. immutability. A few methods like count() and index() were exhibited. Finally they were told the significance of using tuples.

**Exercises**

In order to keep the session hands on and interactive, the students were given many exercise problems of gradually increasing complexity. If any student failed, the volunteers would help them out. After the time given was elapsed, the solution was displayed and the output(s) was shown.

**Outcome**

At the end of the session, students were able to

* Appreciate the concept of lists and tuples in python.
* Appreciate the difference between mutable and non mutable datatypes.
* Use lists and tuples in their python programs.
* Use appropriate functions and methods for the same.

**Instructor**

Eeshaan Achar – 01JST17CS052

**The Session**

Date: 19th September, 2019

Venue: CS101

Audience: 1st, 2nd and 3rd year students from various branches.

