**ASSIGNMENT-7**

**1.How does break, continue and pass work?**

Break, Pass and Continue statements are loop controls used in python. The break statement, as the name suggests, breaks the loop and moves the program control to the block of code after the loop (if any). The pass statement is used to do nothing.

**2.What is the difference between list and tuples in Python?**

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| --- | --- |
| **LIST** | **TUPLES** |
| The items are surrounded in square brackets. | The items are surrounded in parenthesis. |
| Lists are mutable in nature. | Tuples are immutable in nature. |
| There are 46 available methods on lists. | There are 33 available methods on tuples. |
| In dictionary, we can’t use lists as keys. | In dictionary, we can create key using tuples. |

**3.What are functions in python?**

A function is a block of code that only runs when it is called. Python functions return a value using a return statement, if one is specified. A function can be called anywhere after the function has been declared.

**4.What is a lambda function?**

A lambda function is a small anonymous function. A lambda function can take any number of arguments, but can only have one expression.

**5.How can you generate Random numbers in python?**

To generate random number in Python, randint () function is used. This function is defined in [random module](https://docs.python.org/3.6/library/random.html).

**6.What is the difference between range and xrange?**

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| --- | --- |
| **Range ()** | **Xrange ()** |
| Returns a list of integers. | |  | | --- | | Returns a generator object. | |  | |
| Execution speed is slower | |  | | --- | | Execution speed is faster. | |  | |
| Takes more memory as it keeps the entire list of elements in memory. | |  | | --- | | Takes less memory as it keeps only one element at a time in memory. | |  | |
| All arithmetic operations can be performed as it returns a list. | |  | | --- | | Such operations cannot be performed on xrange(). | |  | |
| In python 3, xrange() is not supported. | In python 2, xrange() is used to iterate in for loops. |

**7.How do you write comments in Python?**

A comment in Python starts with the hash character, # , and extends to the end of the physical line. A hash character within a string value is not seen as a comment, though. To be precise, a comment can be written in three ways - entirely on its own line, next to a statement of code, and as a multi-line comment block.