1. How does break , continue and pass work?

The break statement takes care of terminating the loop in which it is used. If the break statement is used inside nested loops, the current loop is terminated, and the flow will continue with the code followed that comes after the loop.

The **continue** statement skips the code that comes after it, and the control is passed back to the start for the next iteration.

Python pass statement is used as a placeholder inside loops, functions, class, if-statement that is meant to be implemented later.

1. What is the difference between list and tuples in python?

List is just like the arrays, declared in other languages. Lists need not be homogeneous always which makes it the most powerful tool in Python. In Python, the list is a type of container in Data Structures, which is used to store multiple data at the same time. Lists are a useful tool for preserving a sequence of data and further iterating over it.

Tuple is also a sequence data type that can contain elements of different data types, but these are immutable in nature. In other words, a tuple is a collection of Python objects separated by commas. The tuple is faster than the list because of static in nature.

1. What are functions in python?

In computer programming, a function is a named section of a code that performs a specific task. This typically involves taking some input, manipulating the input and returning an output.

* Function blocks begin with the keyword **def** followed by the function name and parentheses ( ( ) ).
* Any input parameters or arguments should be placed within these parentheses. You can also define parameters inside these parentheses.
* The first statement of a function can be an optional statement - the documentation string of the function or *docstring*.
* The code block within every function starts with a colon (:) and is indented.
* The statement return [expression] exits a function, optionally passing back an expression to the caller. A return statement with no arguments is the same as return None.

Syntax:

def functionname( parameters ):

"function\_docstring"

function\_suite

return [expression]

1. What is lambda function?

A Lambda Function in Python programming is an anonymous function or a function having no name. It is a small and restricted function having no more than one line. Just like a normal function, a Lambda function can have multiple arguments with one expression.

1. How can you generate random numbers in python?

There is a need to generate random numbers when studying a model or behavior of a program for different range of values. Python can generate such random numbers by using the random module. In the below examples we will first see how to generate a single random number.

Example:

Import random

n = random.random()

print(n)

1. What is the difference between range and xrange?

The range() and xrange() are two functions that could be used to iterate a certain number of times in [for](https://www.geeksforgeeks.org/loops-and-loop-control-statements-continue-break-and-pass-in-python/) loops in Python. In Python 3, there is no xrange, but the range function behaves like xrange in Python 2. If you want to write code that will run on both Python 2 and Python 3, you should use range().

* **range()** – This returns a range object (a type of iterable).
* **xrange()** – This function returns the **generator object** that can be used to display numbers only by looping. The only particular range is displayed on demand and hence called “**lazy evaluation**“.

1. How do you write comments in python?

Comments in Python begin with a hash mark (#) and whitespace character and continue to the end of the line.

Example:

#this is a comment