

## Assignment - 1

1. What is python language?

Python is an interpreted, high-level, general purpose programming language. Created by Guido van Rossum and first released in 1991 and further developed by the Python Software Foundation. It was designed with an emphasis on code readability, and its syntax allows programmers to express their concepts in fewer lines of code.

2. What are the key features of python?

- \* Simple
- \* Easy to learn
- \* Extensible
- \* Free and open source
- \* Scalable
- \* High level language
- \* Portable
- \* Object oriented
- \* Interpreted



3 How is python an interpreted language?

Python is called an interpreted language because it goes through an interpreter which turns code you write into the language understood by your computer's processor. That is it converts source code written by the developer into intermediate language which is again translated into native language/machine language that is executed.

4 How is memory managed in python?

Memory management in python involves a private heap containing all python objects and data structures. The management of this private heap is ensured internally by the python memory manager. Memory management is the process by which applications read and write data.

5 What is python path?

Python path is an environment variable which you can set to add additional directories where python will look for modules and packages. For most installations you should not set these variables since they are not needed for



python to run. python knows where to find its standard library.

6 What are generators in python?

Python generators are used to create iterators, but with a different approach. Generators are simple functions which return an iterable set of items, one at a time in a special way. The generator function can generate as many values [possibly infinite] as it wants, yielding each one in its turn.

7 Does python have oops concepts?

Yes, python have oops concepts. Python is an object oriented programming and includes concepts like object, class, method, inheritance, polymorphism, data abstraction, Encapsulation.

8 Is python case sensitive?

Yes, python is case sensitive language. This means variable and variable are not same. Always give the identifiers a name that makes sense.



9 How long can an identifier be in Python?

Identifiers are unlimited in length.

It has 79 characters.

There are certain rules that users must follow to name an identifier.

10 With Python, how do you find out which directory you are currently in?

To find out which directory in python you are currently in, use the `getcwd()` method.

`cwd` is for current working directory in python.

This returns the path of the current python directory as a string in python.