ASSINGMENT 15/2/22

1. What is python, why it is so popular?

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse.

Python so popular is that it is an easy-to-learn programming language. Due to its easier understandability by humans, it is easier to make models for machine learning. Furthermore, many coders say that Python is more intuitive than other programming languages.

2.what are the key features of python?

Easy to code
Free and Open Source
Object-Oriented Language
GUI Programming Support
High-Level Language
Extensible feature
Python is Portable language
Python is Integrated language
Interpreted Language
Large Standard Library
Dynamically Typed Language

3. what type of language is python?programming or scripting

Python is an interpreted, interactive, object-oriented programming language. It incorporates modules, exceptions, dynamic typing, very high level dynamic data types, and classes. It supports multiple programming paradigms beyond object-oriented programming, such as procedural and functional programming.

4.what is pep8?

PEP 8, sometimes spelled PEP8 or PEP-8, is a document that provides guidelines and best practices on how to write Python code. It was written in 2001 by Guido van Rossum, Barry Warsaw, and Nick Coghlan. The primary focus of PEP 8 is to improve the readability and consistency of Python code.

5.python an interpreted language explain?

Python is an interpreted language, which means the source code of a Python program is converted into bytecode that is then executed by the Python virtual machine. Python code is fast to develop: As the code is not needed to be compiled and built, Python code can be readily changed and executed.

6. 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.

7.what is name space in python?

A namespace is a system that has a unique name for each and every object in Python. An object might be a variable or a method. Python itself maintains a namespace in the form of a Python dictionary.