INTRODUCTION TO PYTHON

1.What is Python? Why is it so popular? Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis. The reason for Python is so popular is because it's beginner friendly, making it popular for entry-level coders, also it's open source, which means it's free to use and distribute, even for commercial purposes.

2.What are the key features of Python? (i) It is easy to code and read (ii)Free and open source (iii)Object Oriented (iv)Dynamically typed language (v)High level language

3. What type of language is Python? Programming or Scripting? Python has its interpreter that translates the code into machine level language. So it is a scripted language.

4. What is pep 8? PEP stands for Python Enhancement Proposal. A PEP is a document that provides guidelines and best practices on how to write Python code.The primary focus of PEP 8 is to improve the readability and consistency of Python code.

5.Python is 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.

6. How is memory managed in Python?

7. What is namespace in Python?

8. What is PYTHONPATH?

9. Is Python case sensitive? Yes,Python is case sensitive.It treats uppercase and lowercase characters differently.

10.Is indentation required in python? The indentation in Python is very important. Python uses indentation to indicate a block of code.

11.What are reserved words? Reserved words (also called keywords) are defined with predefined meaning and syntax in the language. These keywords have to be used to develop programming instructions. Reserved words can't be used as identifiers for other programming elements like name of variable, function etc. Examples : and, as,is,in,for,else,if

12.What are the different data types available in python? Strings,Integers,Floats,Boolean,List,Tuples and Dictionary are the different data types available in python.

13.What is indexing and slicing explain with examples? Indexing- index() method helps to find the index position of an element or an item in a string of characters or a list of items. Example:INPUT : list=[60,51,25,37,84,15] list.index[1] # returns the index 1 on the list OUTPUT: 51

Slicing - Slicing is indexing syntax that extracts a portion from a list.This slice object can be used to get a subsection of the collection. Example:INPUT :

list=[60,51,25,37,84,15] print(list[1:5:2]) OUTPUT: [51, 37]

14.Differentiate between rsplit() and split() The rsplit() function splits a string from the right side (from the final character), whereas the split() method splits from the left side (from the first character).

15.Write the properties of string in python? String is an immutable data type.So the properties of string in python are: * Indexing * Slicing * length