ASSIGNMENT

By

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1)What is python language?

a)Python is a general purpose, interpreted, interactive,object oriented, and high level
programming language.
It was created by Guido Van Rossum during 1985-1990

2)What are the key features of Python?

a) Python key features include

1. Easy to learn
2. Easy to read
3. Easy to maintain
4. A broadcast standard library-Python's bulk of the library is very portable and
cross platform compatible on UNIX,Windows, and Macintosh.
5. Interactive mode
6. Portable
7. Extendable
8. Databases
9. GUI Programming
10. Free and open source

3)How is python an interpreted language?

a)An interpreter is a kind of program that executes other programs. When you write
python programs, it converts the source code written by the developer into
intermediate language which is again translated into the machine language that is
executed.The python code you write is compiled into python bytecode, which creates
a file with extension .pyc . The bytecode compilation happened internally, and almost
Completely hidden from the developer.Compilation is simply a translation step,and
byte code is a lower level and platform independent representation of your source
code. Roughly each of your source statements is translated into a group of byte code
Instructions. This byte code can be run much quicker than the original source code
Statements. The .pyc file, is created in compilation step, is then executed by
appropriate virtual machines. The virtual machine just a big loop that iterates through
you're byte code instructions

4)How is memory managed in Python?

a)

- Memory management in Python involves a private heap containing Python objects and data structures.
- Interpreter takes care of Python heap and that the programmer has no access to it
- The allocation of heap space for python objects is done by the Python memory manager.
- The core API of Python provides some tools for the programmer to code reliable and more robust program
- When an object is no longer referenced by the program, the heap space it occupies can be freed
- The garbage collector determines objects which are no longer referenced by the program frees the occupied memory and makes it available to the heap space.

5)What is a python path?

a)Python path is an environmental 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. The only reason to set python path is to maintain directories of custom python libraries that you do not want to install in the global default location that is the site packages directory.

6)What are the generators in python?

a)There are two terms involved in generators

- Generator Function : A generator function is defined like a normal function, but whenever it needs to generate a value, it does so with the yield keyword rather than return. If the body of aa def contains yield, the function becomes a generator function.
- Generator object : Generator function returns a generator object. Generator objects are used either by calling the next method on the generator object .

7)Does python have an oops concept?

a)Yes, python is also an object oriented programming language. It allow us to develop applications using an object oriented approach. In python we can create object and classes . In python, the concept of OOP follows some basic principles: A process of using details from a new class without modifying existing class. Hiding the private details of

a class from other objects. A concept of using common operation in different ways
For different data input. A class is a blueprint for the object.

8)Is python case sensitive?
a)Python is a case sensitive language. This means Variable and variable are not the
same .

9)How long can an identifier be in python?
a)An identifier can be of any length in python but it should not be a keyword and should
not start with a variable and does not contain any special symbols.The maximum
 Possible length of an identifier in python is 79 characters.

10)With python,how do you find out which directory you are currently in?
a)Python os module provides a function to get current working directory
   os. getcwd()
  It returns a string containing the current working directory.