PYTHON

Assignment Questions

1. Who developed **Python** Programming Language?

`Guido van Rossum`

2. Which type of Programming **does** Python support**?**

`Interpreted, object-oriented,high-level programming language with dynamic semantics.`

3. Is Python case sensitive when dealing with identifiers?

Yes , absolutely . It **is a case-sensitive language . It treats uppercase and lowercase characters differently.**

4. What is the correct extension of the Python file?

.py

5. Is Python **code compiled** or interpreted**?**

  INTERPRETED

6. Name a few blocks of code used to define **in Python** language**?**

A block is a piece of Python program text that is executed as a unit. The following are blocks: a module, a function body, and a class definition. Each command typed interactively is a block

7. State a **character** used to give single-line comments in **Python?**

  #

 8. Mention functions which can **help** us to **find** the version **of python** that we are currently working on?
sys.version

9. Python supports the creation of anonymous functions at runtime, using a construct called ?

Lambda

10. **What** does **pip** stand **for python**?

Preferred installer program

11. Mention **a** few built-**in** functions in python?

- print( ) function.
- type( ) function.
- input( ) function.
- abs( ) function.
- pow( ) function.
- dir( ) function.
- sorted( ) function.
- max( ) function.

12. **What is** the maximum possible length **of** an identifier **in Python?**

79 characters

13. What are the benefits of **using Python**?

```
Quality of software**:

Python was meant for readability. It's reusable and maintainable as compared to other
languages. It's easier to understand. It supports all the modern features like OOPs
and functional programming.


* **Productivity of Developers**:

The same program which is written in other high-level languages like c++ or java can
be written in one-third or one-fifth line of code. That means debugging can be easy
and it will be less prone to error which in turn increases the productivity of the
developers.


* **Portability**:

Mostly it's platform-independent. It can run on any platform or OS with minor or no
```

```
change at all which makes it a highly portable language. Now you can use Micro Python
to interact with hardware as well. It can be used on most of the edge devices.


* **Supporting Libraries**:

Python already has a lot of inbuilt libraries that come with the standard python
package which you download from its <a href="https://www.python.org/"
target="_blank">official site</a>. With these libraries, you can build lots of basic
applications or day to day automation tasks like copying data in bulk from one place
to another. Apart from this, there's a huge list of third-party libraries like Numpy,
Matplotlib, Scikit Learn, etc.


* **Fun to use**:

Its simplicity and availability of lots of supporting libraries plus huge open source
community support make development in python a breeze. That's why its widely preferred
by hobbyists as well.* **
```

14. 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.

15. **How** to install **Python** on Windows **and** set **path** variables?

1. Right-clicking *This PC* and going to *Properties*.
2. Clicking on the *Advanced system settings* in the menu on the left.
3. Clicking on the *Environment Variables* button on the bottom right.
4. In the *System variables* section, selecting the *Path* variable and clicking on *Edit*. The next screen will show all the directories that are currently a part of the PATH variable.
5. Clicking on *New* and entering Python's install directory.

16. Is indentation **required in python?**

Indentation refers to the spaces at the beginning of a code line. Where in other programming languages the indentation in code is for readability only, the indentation in Python is very important. Python uses indentation to indicate a block of code.

PW

SKILLS