**Python Assignment**

**29th Jan. 2023**

**Q1 Who developed python programming Language?**

**Sol.** [Guido van Rossum](https://en.wikipedia.org/wiki/Guido_van_Rossum) developed a Python programming Language.

**Q2 Which type of programming does python support?**

**Sol.** Python is an interpreted programming language, supporting object-oriented, structured, and functional programming.

**Q3 Is Python case sensitive when dealing with identifier?**

**Sol.** Yes, Python is a case-sensitive language, i.e., it treats uppercase and lowercase characters differently. This applies to identifiers too.

**Q4 What is the correct extension of the python file?**

**Sol.**  ". py" is the correct extension of the Python file.

**Q5 Is Python code complied or interpreted?**

**Sol.** Python is interpreted.

**Q6 Name a few blocks of code used to define in python language?**

**Sol.** a module, a function body, and a class definition.

**Q7 State a character used to give single-line comments in python?**

**Sol.** single # character before any statement or line of code.

**Q8 Mention function which can help us to find the version of python that we are currently working on?**

**Sol.** The function sys. version can help us to find the version of python that we are currently working on.

**Q9 Python support th creation of anonymous function at runtime, using a construct called \_\_\_\_\_?**

**Sol.** Python supports the creation of anonymous functions (i.e. functions that are not bound to a name) at runtime, using a construct called lambda.

**Q10 What does pip stand for python?**

**Sol.** PIP stands for **Preferred Installer Program**,

**Q11 Mention a few built-in-functions in python?**

**Sol.** Int(), isinstance(), subclass(), iter()

**Q12 What is a maximum possible length of an identifier in python?**

**Sol.** An identifier can have a maximum length of 79 characters in Python. Python is one of the most popular programming languages.

Q13 What are the benefits of python?

1. Sol. Easy-to-learn and Easy-to-use
2. Easy-to-learn and Easy-to-use
3. Interpreted Language
4. Easily Portable
5. Massive Libraries
6. Easy-to-integrate with Other Programming Languages

**Q14 How is memory managed in python?**

**Sol.** Memory management in Python involves **a private heap containing all Python objects and data structures**.

**Q15 How to install Python on windows and set path variables?**

**Sol.** The complete path of **python.exe** can be added by:

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 o​n 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.

**Q16 Is indentation required in Python?**

**Sol.** Indentation is mandatory in python to define the blocks of statements.