Assignment Answers

1. Who developed Python Programming Language?
Ans: Guido van Rossum developed Python Programming Language.

2. Which type of Programming does Python support?
Ans : Object-Oriented Programming and Structured Programming is supported by Python.

3. Is Python case sensitive when dealing with identifiers?
Ans: Yes, Python is case sensitive when dealing with identifiers.

4. What is the correct extension of the Python file?
Ans: '.py 'is the correct extension of the python file.

5. Is Python code compiled or interpreted?
Ans: Python code is interpreted.

6. Name a few blocks of code used to define in Python language?
Ans:Blocks of code used in Python are as follows:

1. Class
2. Exception Handling(try-except-finally)
3. Loops(for, while)
4. Functions
5. Conditional Statements(if, if-else, nested if)

7. State a character used to give single-line comments in Python?
Ans: '#' is used for single-line comments in python.

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

1. sys.version
2. sys.version_info
3. platform.python_version()
4. platform.python_version_tuple()

9. Python supports the creation of anonymous functions at runtime, using a construct called _____ .
Ans: lambda.

10. What does pip stand for python?
Ans: pip is a recursive acronym for ‘pip Install Packages’.

11. Mention a few built-in functions in python?
Ans:
1. abs()
2. bool()
3. complex()
4. dict()
5. float()
6. id()
7. input()
8. int()
9. len()
10. list()
11. print()
12. range()
13. sum()
14. type()

12. What is the maximum possible length of an identifier in Python?
Ans: An identifier can have a maximum length of 79 characters in Python.

13. What are the benefits of using Python?
Ans:
1. Easy to Learn
2. Cross-Platform Compatibility
3. Open Source
4. High Level Programming
5. Versatility

14. How is memory managed in Python?
Ans: 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. The Python memory manager has different components which deal with various dynamic storage management aspects, like sharing, segmentation, preallocation or caching.

15. How to install Python on Windows and set path variables?
Ans: Installing Python on Windows, follow these steps:

1. Download the Python installer from the official website: https://www.python.org/downloads/windows/
2. Choose the latest version of Python and the appropriate architecture (32-bit or 64-bit) based on your system configuration.
3. Run the installer and select the "Install Now" option.
4. Follow the installation wizard, selecting the desired options (e.g., custom installation or add Python to PATH).
5. Click the "Install" button and wait for the installation to complete.

Once you have installed Python, you may need to set the PATH variable to make it accessible from the command prompt. Here's how:

1. Right-click on "My Computer" and select "Properties".
2. Click on "Advanced system settings" and then "Environment Variables".
3. Under "System Variables", find "Path" and click "Edit".
4. Add the path to your Python installation directory (e.g., C:\Python310) at the end of the list, separating it from the previous entry with a semicolon.
5. Click "OK" to save the changes.

16. Is indentation required in python?
Ans: Yes, indentation is required in Python. Indentation is used in Python to indicate the block of code that belongs to a specific control statement.