

Assignment Solution

1. Who developed Python Programming Language?

-> Python was created by Guido van Rossum, and released on February 20, 1991.

2. Which type of Programming does Python support?

-> Python is a multi-paradigm programming language. Object-oriented programming and structured programming are fully supported, and many of their features support functional programming and aspect-oriented programming (including metaprogramming and metaobjects).

3. Is Python case sensitive when dealing with identifiers?

-> Yes, Python is a case-sensitive language.

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

-> ".py" extension.

5. Is Python code compiled or interpreted?

-> Python is both compiled as well as an interpreted language, which means when we run a python code, it is first compiled and then interpreted line by line.

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

-> 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?

-> we can use "#" or "##".

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?

-> PIP stands for **Preferred Installer Program**.

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

-> Built-in functions in python are-

1. print()
2. type()
3. input()
4. len()
5. sum()

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

-> An identifier in Python can have a maximum length of 79 characters.

13. What are the benefits of using Python?

-> The benefits of using python are:

1. Easy to use.
2. Extensive Libraries and frameworks.
3. Efficient.
4. Versatile.

14. How is memory managed in Python?

-> Memory management in Python involves a private heap containing all Python objects and data structures.

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

-> Installation:

1. Download the binaries:
 - a. Go to Python official website and navigate to the download tab for windows.
 - b. Choose the latest python version.
 - c. Click on the link and then choose your system version (32 or 64) download according to your system.
2. Run the installer:
 - a. Run the installer, and check the Install launcher for all users check box.
 - b. Then install according to your need by choosing customizable installation.
 - c. Once the installation is over, you will see a Python Setup Successful window.

3. Set path variables:

- a. Right-clicking This PC and going to Properties.
- b. Clicking on the Advanced system settings in the menu on the left.
- c. Clicking on the Environment Variables button on the bottom right.
- d. 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.
- e. Clicking on New and entering Python's install directory.

16. Is indentation required in python?

-> In python indentation is important because it defines the block of statements.