

1. Who developed python programming language?

Ans. Python initially designed by Guido van Rossum in 1991 and developed by Python Software foundation.

2. Which type of programming does python support?

Ans. Python supports several type of programming like Object-Oriented Programming, Imperative programming, Functional programming and Procedural programming.

3. Is Python case sensitive when dealing with identifiers?

Ans. Yes python is case sensitive when dealing with identifiers. It treats uppercase and lowercase character differently.

4. What is the correct extension of Python file?

Ans. The correct extension of python file is '.py'.

5. Is python code compiled or interpreted?

Ans. Python code is interpreted, not compiled. The python interpreter reads and executes the code line by line at runtime, rather than compiling the code into machine-executable instructions beforehand.

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

Ans. Functions, classes, if-else statement, for and while loops etc.

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

Ans. '#' is the character which is 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?

Ans. We can use the 'sys' module and its 'version' attribute to find the version of python that we are currently working on.

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

10. What does pip stand for python?

Ans. Python pip is the package manager for python packages. We can use pip to install packages that do not come with python.

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

Ans. Here are some of the commonly used built-in functions in Python print(), len(), int(), list(), float(), str() etc.

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

Ans. There is no specific limit to the length of an identifier. An identifier can have any length that is practical for your system and use case.

13. What are the benefits of using Python?

Ans. Python is high level language which is easy to learn and use. Python is versatile in nature, it can be used for a wide range of applications, including web development, data analysis, artificial language and more. Python has a large and active community of users and developers. Python is one of the most popular programming languages, and it is used by many large companies and organizations, including Google, NASA, and the CIA.

14. How is memory managed in Python?

Ans. Memory management is handled automatically by the Python memory manager. The memory manager is responsible for allocating memory to Python. Python uses a garbage collector to keep track of all the objects in the program and automatically reclaim memory that is no longer being used. Also, python provides several tools for manually managing memory, such as the 'del' statement and the 'gc' module, which allows you to explicitly deallocate memory and control the garbage collector.

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

Ans. Firstly download the latest version of python for windows. Install python by double clicking on python installer that you just downloaded, and follow the prompts to install Python. Be sure to check the option to "Add Python to PATH" during the installation process. To check that python has been installed successfully, open the Command Prompt, and type "python" followed by Enter. If the installation was successful, you should see the Python prompt, which looks like ">>>".

To set the path variables, you will need to add the location of the Python executable to your system's PATH environment variable. To do this, follow these steps:

- Right click on the start menu and select "System".
- Click on "Advanced system settings".
- Click on the "Environment Variables" button.
- Scroll down to the "System variable" section, and find the "Path" variable.
- Click on the "Edit" button, and then click on "New".
- Enter the location of the Python executable
- Close all the windows, and open a new Command Prompt.

Now, you should be able to run Python from any location in the Command Prompt.

16. Is indentation required in python?

Ans. Yes, indentation is required in Python and is used to indicate the block of code that is associated with a control flow statement, such as an if statement, for loop, or function definition. In python, whitespace is used to structure code, and indentation is used to indicate a block of code that belong together. If you don't indent your code properly in Python, you will get an error.