

Q1. who developed python programming language?

Solution: It was created by **Guido van Rossum**, and released in 1991.

Q2. which type of programming does python support?

Solution: 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).

Q3. is python case sensitive when dealing with identifiers?

Solution: **Yes, Python is a case-sensitive language**, i.e., it treats uppercase and lowercase characters differently. This applies to identifiers too. You must avoid using the same name with different cases while naming identifiers.

Q4. what is the correct extension of the python file?

Solution: Python is a widely used programming or coding language used for different purposes. The extensions for Python files are - **.py, .pyi, .**

Q5. Is python code compiled or interpreted?

Solution: Python is an interpreted language, which means the source code of a Python program is converted into bytecode that is then executed by the Python virtual machine. Python is different from major compiled languages, such as C and C++, as Python code is not required to be built and linked like code for these languages.

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

Solution: A Python program is constructed from code blocks. 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.

Q7. State a character used to give single line comment in python language?

Solution: **#** character

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

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

Q9. Python supports the creation of anonymous function at runtime, using a construct?

Solution: 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?

Solution: preferred installer program

Q11. mention few built-in function in python?

Solution:

1. **print() function.**
2. **type() function.**
3. **input() function.**
4. **abs() function.**
5. **pow() function.**
6. **dir() function.**
7. **sorted() function.**
8. **max() function.**

Q12. What is the maximum possible length of an identifier in python?

Solution: 79 character

Q13. What are the benefits of using python?

Solution:

1. **Data science.**
2. **Scientific and mathematical computing.**
3. **Web development.**
4. **Finance and trading.**
5. **System automation and administration.**
6. **Computer graphics.**
7. **Basic game development.**
8. **Security and penetration testing.**

Q14.How is memory managed in python?

Solution: 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.

Q15. How to install python on window and set path variables?

Solution;

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

Q16.Is indentation required in python?

Solution: 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.