

1 Who developed the python programming language?

Ans: Python was developed by Guido van russom and first released in 1991.

2 Which type of programming does python support?

Ans: Python is a multi-paradigm programming language and support following

- 1 Object-Oriented Programming(OOP)
- 2 Imperative programming
- 3 Functional programming
- 4 Procedural Programming

3 Is python case sensitive when dealing with identifiers?

Ans: Yes, Python is case sensitive when it comes to identifiers (i.e name of variable , functions etc)

4 What is the correct extension of the python files?

Ans : ".Py" is the extension for python files, which is used for python source code files.

5 Is python code compiled or interpreted?

Ans: Python is an interpreted language, which means its source code is executed line by line, without the need for a separate compiler.

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

Ans: Following are code structures

1. Functions like "def"
2. Classes defined using "class"
3. Conditional statements - defined using "if"
4. loops: "for" or "while"

7 state a character used to give single-line commnect in python

Ans : "#" hash sign are used to single-line comment tripple quotes ("....") are used to multi-line comments

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

Ans:Below are the function used to know the version of python

- 1 python --version
- 2 "sys.version" function

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

Ans : Lambda function

10 What does pip stand for in python?

Ans : pip stand for " Preferred installer program"

11 Mention a few build-in functions in python?

Ans: There are many build-in functions available in python such as:

- 1-"print()":Used for display output
- 2-"len()":returns the length of objects(like string, list tuple)
- 3- "range()": Generate sequence of numbers
- 4- "sum()":calculates the sum of elements
- 5 - "str()": string function
- 6 "int()": integer values
- 7 "float()": float values

12 what is the maximum possible length of an identifier in python?

Ans : No any length limit for identifier (" But need to keep short and descriptive to easily understand")

13. What are the benefits of using python?

Ans : Following are the benefits by using python:

1. Object-oriented
2. Dynamic typing
3. Multiple libraries available
4. Versatile
5. Easy to learn
- 6 cross-platform compatibility

14 How is memory managed in python?

Ans: In Python memory is managed by the Python memory manager, which is responsible for allocating and deallocating memory to objects used by the Python interpreter.

The memory manager works by dividing memory into small blocks and allocating them to objects as needed.

When an object is no longer used, its memory block is returned to the memory manager, which can then allocate it to a new object.

15 How do you install python on windows and set path variables ?

Ans : Below are steps to install python on windows machine:

1. Download the Python installation package from the official Python website:
<https://www.python.org/downloads/> (Choose windows packages)

2. Run the installation package and follow the instructions to install Python on your system. During the installation process, make sure to select the option to add Python to the PATH environment variable.
3. After the installation is complete, open the Start menu and search for "Environment Variables".
4. Click on "Edit the system environment variables".
5. In the System Properties window, click on the "Environment Variables" button.
6. In the Environment Variables window, scroll down to the "System variables" section and find the "Path" variable.
7. Click on the "Path" variable and then click the "Edit" button.
8. In the Edit environment variable window, click the "New" button and add the location of the Python installation to the PATH.
9. Click OK to save the changes and close all windows.
10. verify using the command prompt open and type "python" its show thw version of python.

16 Is indentation required in python?

Ans : Yes, Indentation is required to define blocks of code.