1. Who developed Python Programming Language ?

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

2. Which type of Programming does Python support?

Python supports both object-oriented and procedural programming

3. Is Python case sensitive when dealing with identifiers?

Yes, Python is case sensitive when dealing with identifiers.

Python and python are not same while using them as identifiers.

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

.py is the correct extension of the python file

5. Is Python code compiled or interpreted?

Python code is interpreted

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

A code block is a *group* of statements that will be run as a *unit*.

Examples of blocks:

If – else : conditional blocks

While, For : loop blocks

Functions & Classes etc.,

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

# - character 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?

python –version

sys.version

platform.python\_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 python package index

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

all() and any()

enumerate()

eval()

range()

map()

filter()

zip()

sorted()

reversed()

isinstance()

format()

open()

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

79 characters

13. What are the benefits of using Python?

Easy to read, learn and code

Dynamic Typing

Free and Open Source

Potable

Extensive Third-Party Libraries

Interpreted Language

Memory Management

14. How is memory managed in Python?

Python uses a memory manager to manage memory allocation and deallocation. The memory manager is responsible for allocating memory to Python objects and tracking which objects are currently in use.

Python has two types of memory that it uses: stack memory and heap memory. Stack memory is used for storing function call frames and local variables. This type of memory is used for short-lived objects and is allocated and deallocated very quickly.

On the other hand, heap memory is used to store objects with a longer lifetime, such as long-lived data structures like lists and dictionaries.

Python also has a built-in garbage collector that automatically frees up memory no longer in use. The garbage collector keeps track of objects no longer needed, and when memory is low, it reclaims the memory occupied by these objects. This process helps to prevent memory leaks and ensures that memory is used efficiently.

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

Download the latest 32 or 64 bit version of python from the official website  [(https://www.python.org/downloads)](https://www.python.org/downloads/).

Run the downloaded installer with administrative privileges. go through the installation wizard choosing recommended options. Perform installation for all users and add python executable to path system variable when prompted to.

  open the Start menu and search for the Edit the system environment variables entry, which opens up a System Properties window. In the Advanced tab, click on the button Environment Variables. There you’ll see User and System variables, which you’ll be able to edit.

Edit the path variable and add the below path to it.

C:\Users\\*username\*\AppData\Local\Programs\Python\Python38

(change the variable value to match your actual installation path).

Can add a new user variable with the name HOME and set the value with the below path.

C:\Users\\*username\*\AppData\Local\Programs\Python\ (change the variable value to match your actual installation path).

16. Is indentation required in python?

Yes, it is necessary because it specifies a block of code. It is a way of telling a Python interpreter that a group of statements belongs to a particular block of code.

Without indentation, Python does not know which statement to execute next or which statement belongs to which block.

If not followed, it will throw IndentationError