1. Who developed the python programming language?

Ans. Python programming language was developed by Guido van Rossum.

2. Which type of programming does python support?

Ans. Python supports multiple programming paradigms including Object-Oriented Programming (OOP), Procedural Programming, Functional Programming, and Structured Programming.

3. Is python case-sensitive when dealing with identifiers?

Ans. Yes, Python is case-sensitive when dealing with identifiers.

4. What is the correct extension of the python files?

Ans. The correct extension for Python files is .py.

5. Is python code compiled or interpreted?

Ans. Python code is interpreted, not compiled.

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

Ans. In Python, there are several blocks of code used to define structures like functions, classes, loops, and conditionals.

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

Ans. In Python, the # symbol gives single-line comments.

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

Ans. To find the version of Python that you are currently working with, you can use the 'sys' module in Python and access the version attribute of the 'sys' module.

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

Ans. In Python, anonymous functions can be created at runtime using a construct called "lambda functions".

10. What does pip stand for in python?

Ans. PIP stands for "Pip Installs Packages".

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

Ans. Here are a few built-in functions in Python:

print(): used to print output to the console.

len(): returns the length of a string, list, tuple, or other sequences.

int(): converts a string or a float to an integer.

float(): converts a string or an integer to a float.

str(): converts an integer, float, or another object to a string.

sum(): adds the elements of an iterable (list, tuple, etc.).

max(): returns the maximum value from an iterable.

min(): returns the minimum value from an iterable.

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

Ans. In Python, there is no specific limit to the length of an identifier (variable name, function name, class name, etc.).

13. What is the benefit of using python?

Ans. There are many benefits to using Python as a programming language, including Easy to learn and use, Versatile, Large community and extensive libraries, Cross-platform compatibility, Dynamic typing, and Interpreter-based.

14. How is memory management in python?

Ans. Memory management in Python is handled automatically by the Python interpreter, using a system known as reference counting. This means that Python keeps track of the number of references to each object in memory, and automatically frees up memory that is no longer being used.

15. How to install python on windows and set path variables?

Ans. Here are the steps to install Python on Windows and set the path variable:

Download the latest version of Python from the official Python website (https://www.python.org/downloads/).

Run the installer and follow the instructions to install Python on your Windows computer. Make sure to select the option to add Python to your PATH environment variable.

After the installation is complete, open the Command Prompt and type python to check if Python is installed and the path variable is set correctly.

If you see the Python interpreter prompt (>>>), then Python has been installed and the path variable has been set correctly.

16. Is indentation required in python?

Ans. Yes, indentation is required in Python. Indentation indicates the scope of code blocks in Python, such as those for loops, if statements, and functions.

In Python, indentation is used instead of braces or other syntax elements to delimit code blocks.