1) Who developed Python Programming Language?

Answer: Python was created by Guido van Rossum and first released in 1991.

2) Which type of programming does python support?

Answer: Python is a dynamic and strongly typed object-oriented programming language.

It employs both duck typing and gradual typing, via type hints.

It supports multiple programming paradigms including both imperative: object-oriented, procedural and declarative (functional, concurrent) flavors.

While programming across paradigms is fully supported, everything in Python is an object.

3) Is Python case sensitive when dealing with identifiers?

Answer: Yes, Python is a case-sensitive language, i.e., it treats uppercase and lowercase characters differently.

This applies to identifiers too. One must avoid using the same name with different cases while naming identifiers.

4) What is the correct extension of the Python File?

Answer: Python is a widely used programming or coding language used for different purposes.

The extensions for Python files are - .py, .pyi, .pyc, .pyd, .pyo, .pyw, and .pyz.

5) Is Python code compiled or interpreted?

Answer: Python program is first compiled and then interpreted.

The compilation part is hidden from the programmer thus, many programmers believe that it is an interpreted language.

The compilation part is done first when we execute our code and this will generate byte code and internally this byte code gets converted

by the python virtual machine(p.v.m) according to the underlying platform(machine+operating system).

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

Answer: a = "Hello"

```
b = "World"
c = a + b
print(c)
```

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

Answer: Comments are lines of code or statement that the interpreter or compiler ignores during execution.

These are used to write some programmer readable information/explanation about the code, which helps other programmers understand the code.

We can write a single-line comment by adding a single # character before any statement or line of code.

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

Answer: To get the Version of the python Interpreter, they are listed as follows:

Using sys.version method

Using python_version() function

Using Python -V command

9) Python supports the creation of anonymous functions at runtime, using a construct called----------?

Answer: lambda

10) What does pip stand for python?

Answer: Pip stands for preferred installer program for Python.

11) Mention few Built-In functions in python.

Answer: 1) print( ) function

2)type( ) function

3)input( ) function

4)pow( ) function

5)dir( ) function

6)sorted( ) function

7)max( ) function.

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

Answer: An identifier can have a maximum length of 79 characters in Python.

13) What are the benefits of using python?

Answer: 1)Presence of third-party modules.

2)Extensive support libraries(NumPy for numerical calculations, Pandas for data analytics, etc.)

3)Open source and large active community base.

4)Versatile, Easy to read, learn and write.

5)User-friendly data structures

6)High-level language

7)Dynamically typed language(No need to mention data type based on the value assigned, it takes data type)

8)Object-Oriented and Procedural Programming language.

9)Portable and Interactive

14) How is memory managed in python?

Answer*: 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.

15) How to install Python on windows and set path variables?

Answer*: Install python from this link https://www.python.org/downloads/*

After this, install it on your PC. Look for the location where PYTHON has been installed on your PC using tge following command on your command prompt: cmd python.

Then go to advanced system settings and add new variable and name it as PYTHON_NAME and paste the copied path.

Then look for the path variable, select it's value and select edit

Add a semicolon towards the end of the value if it's not present and then type %PYTHON_HOME%

16) Is indentation required in python?

Answer*: Indentation refers to the spaces at the beginning of a code line.*

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.