

# **Satish S Karande**

## **Jan 29th Assignment**

### **1. Who developed Python Programming Language?**

-> Guido van Rossum.

### **2. Which type of Programming does Python support?**

-> Python is an interpreted programming language, which supports object-oriented, structured, and functional programming.

### **3. Is Python case sensitive when dealing with Identifiers?**

-> Yes, Python is case sensitive when dealing with Identifiers.

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

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

### **5. Is Python code compiled or Interpreted?**

-> Python is both compiled as well as an interpreted language, which means when we run a python code, it is first compiled and then interpreted line by line.

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

-> Indentation is used to define a block of code in python. Braces {} are used to define a block of code in most programming languages, like C, C++, and Java. But this indentation makes python unique among all programming languages.

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

-> Hash character(#) is used to comment the single line in the Python program.

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

-> 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 \_\_\_\_\_.**

-> Lambda

**10. What does pip stand for python?**

-> Preferred Installer Program

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

-> print( ) function, type( ) function, input( ) function, pow( ) function, sorted( ) function, max( ) function etc...

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

-> An identifier can have a maximum length of 79 characters in Python.

**13. What are the benefits of using Python?**

-> Presence of third-party modules

- Extensive support libraries(NumPy for numerical calculations, Pandas for data analytics, etc.)
- Open source and large active community base
- Versatile, Easy to read, learn and write
- User-friendly data structures
- High-level language

- Dynamically typed language(No need to mention data type based on the value assigned, it takes data type)
- Object-Oriented and Procedural Programming language
- Portable and Interactive
- Ideal for prototypes – provide more functionality with less coding
- Interpreted Language
- Portable across Operating systems

#### **14. How is memory managed in Python?**

-> 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?**

-> The complete path of python.exe can be added by:

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.  
The next screen will show all the directories that are currently a part of the PATH variable.
5. Clicking on New and entering Python's install directory.

#### **16. Is Indentation required in python?**

-> Indentation is mandatory in python to define the blocks of statements. It is preferred to use whitespaces instead of tabs to indent in python.