# Aqib Ansari Data Science Masters Course Python Assignment-1 (29-Jan)

# 1. Who developed Python Programming Language?

Ans) Guido van Rossum

# 2. What type of programming does Python support?

Ans) Python is an interpreted programming language that supports Object Oriented Programming, Structured and Functional Programming

# 3.Is Python case sensitive when dealing with identifiers?

Ans) Yes, Python is case sensitive

# 4. What is the correct extension of the python file?

Ans) '.py' is the correct extension of python file.

# 5.Is Python code compiled or interpreted?

Ans) Python code is both compiled and interpreted

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

Ans) Control Flow Statement (if,elif, else) and indention are some block of codes in Python

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

Ans) '#' is used for single line comments

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

Ans) Through 'sys.version' we can get the version of Python and if we type 'python --version' then also we can get the python version.

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

Ans) lambda

# 10. What does pip stand for?

Ans) Preferred Installer Program. It is used for installing packages and libraries

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

Ans) append(),pop(),int(),str(),range() are some built in functions of python

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

Ans) 79 characters is the maximum possible length of identifier

# 13. What are the benefits of using Python?

Ans) Some benefits of python are its syntax is easy, it is high-level programming language, it supports all types of programming like object-oriented programming, functional programming and structured programming, it has various libraries through which we can use in web development, data science, app development, and many more uses it has.

# 14. How is memory managed in python?

Ans) Memory management in Python is managed by the Python Memory Manager. It is responsible for allocating and deallocating memory to Python objects and other internal operations such as garbage collection. The Python Memory Manager consists of a number of components such as the heap, the garbage collector, and the object allocator. The heap is where the Python objects are stored and the garbage collector is responsible for reclaiming the memory occupied by objects that are no longer in use. The object allocator is responsible for allocating memory for new objects.

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

- 1. Download and install the latest version of Python from the official Python website.
- 2. After installation, open the Windows command prompt and enter the command "py -3". This should display the Python version you have installed.

- 3. To set the path variables, go to the Control Panel -> System and Security -> System -> Advanced system settings -> Environment Variables.
- 4. Under System Variables, look for the PATH variable. Select it and click Edit.
- 5. Add the path to the Python installation directory to the PATH variable.
- 6. After setting the path variables, open the command prompt again and type "py -3" again to check that the path is set correctly.
- 7. You are now ready to use Python on your Windows system.

# 16.Is indentation required in python?

Ans) Yes