**DATA SCIENCE MASTERS**

Assignment: 29th Jan 2023

1. **Who Developed Python Programming Language?**

Python was developed by **Guido van Rossum.**

1. **Which type of programming does Python supports?**

Python is a multi-paradigm programming language includes Object-Oriented Programming (OOP), Functional Programming, Imperative Programming and Scripting.

1. **Is Python case sensitive when dealing with identifiers?**

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

1. **What is the correct extension of the python file?**

“.py” is the correct extension for a Python file.

1. **Is python code complied or interpreted?**

Python is an interpreted language.

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

if, elif, while, for etc.

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

“#” symbol is used to give single-line comments.

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

sys.version and platform.python\_version() are functions used to find the current version of python.

1. **Python supports the creation of anonymous functions at runtime, using a construct called \_ \_ \_ \_ \_ \_**

Lambda expression

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

"pip" stands for "Pip Installs Packages."

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

int(), float(), str(), print(), type() etc.

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

“No limit” on the maximum length of an identifier in Python.

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

Following are the some of the benefits of using Python

* Python's simple, easy to learn syntax. It’s easier to understand. It supports all the modern features like OOPs and functional programming.
* Supporting of huge list of third-party libraries like Numpy, Matplotlib, Scikit Learn, etc.

1. **How is memory managed in Python?**

Memory management is handled by the Python memory manager which manages a private heap containing all Python objects and data structures.

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

* Download Python from the official website: <https://www.python.org/downloads/>
* Run the Python installer and follow the instructions to complete the installation.
* Open the Start menu, search for "Environment Variables", and click on "Edit the system environment variables".
* In Advance tab column, click on "Environment Variables".
* Go to the "System Variables" section, find the "Path" variable, click on it and then click "Edit".
* Click on "New" and add the path to the Python installation, usually "C:\Floder\_name".
* Close all windows.

1. **Is indentation required in python?**

“Yes” indentation is required in python.