**ASSIGNMENT-1 Introduction to Python**

1. **What are the key features of Python?**

The key features are it is simple English like programming language. It has only 30+ keywords in syntax, less number of coding lines and hence because of these features.

It is free and open source, high level programming language, memory management and security are taken care of in Python and hence overall there is less development cost.

It is platform independent, portable as it provides same results across different platforms when migrated.

It is dynamically typed language, procedure oriented, object oriented, internal python interpreter takes care of compilation automatically. Moreover it has extensive libraries developed by the python community.

1. **Python is an interpreted language. Explain.**

Internal python interpreter takes care of compilation automatically and if the complication fails it throws syntax error. Once compilation is successful, Python Virtual Machine executes the code.

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

Here are some main benefits of Python.

* Open source
* Readability
* Interpreted language
* Data science
* Wide applicability
* Easy memory management
* Large community
* Asynchronous coding
* Integration with other languages

1. **What are the applications of Python?**

Python is used in Data analysis applications, Machine learning, Artificial Intelligence applications, desktop, web, games and database applications.