**ASSIGNMENT-1 Introduction to python**

1. What are the key features of python?
2. Python an interpreted language. Explain.
3. What are the benefits of python?
4. What are the applications of Python?

Answers:

1. What are the key features of python?

Key Features of Python are as below:

1. Simple and Easy to learn

a) Python is a simple programming language and is easy to learn.

1. There is more readability and simplicity because python programs contain less number of lines compared to other programming languages.
2. Development cost of the project can be reduced by using Python.
3. Free and Open Source
4. No license required to use Python Software.
5. Source code is open and can be easily customized as per our requirement.
6. High Level Programming Language
7. Programmer friendly language.
8. Memory management and security is easy.
9. Platform independent
10. It can be used on multiple platforms like Windows, Linux, Mac etc. without the need to rewrite the code.
11. Portability
12. Python programs can be migrated from one platform to another with same results.
13. It is both Object oriented and procedure-oriented language.
14. It is an interpreted language as internally the python interpreter takes care of the compilation.
15. It has an extensive, rich built-in library.
16. Python is an interpreted language. Explain.

In python, the code directly gets executed without getting converted into machine language. Hence it is slow and takes single instruction as input, therefore memory required is less for python.

1. What are the benefits of Python?

Data Analysis Applications, Machine Learning, Developing AI applications, Desktop Applications, Database applications, web applications and some games.

1. What are the applications of Python?

Industrial Light and Magic, Facebook, Instagram, Spotify, Quora, Netflix, Dropbox etc.