**Assignment-1**

1. **What is Software?**

* Software is a set of programs that allows the users to perform a well-defined function or some specified task.
* Software is responsible for directing all computer-related devices and instructing them regarding what and how the task is to be performed. However, the software is made up of binary language (composed of ones and zeros), and for a programmer writing the binary code would be a slow and tedious task. Therefore, software programmers write the software program in various human-readable languages such as Java, Python, C#, etc. and later use the source code.

1. **What is programming?**

* Programming is an exercise or practice that boost our logical thinking and improves a problem-solving skill. It teaches us how to accomplish a task with the help of a computer program or software. Therefore, in simple terms, programming is a task to implement a solution to a problem in the form of computer language. In this section, we will discuss the word programming, programming languages, its type, advantages, disadvantages, and their uses.

1. **What is python?**

* Python is an interpreted, object-oriented, high-level programming language with dynamic semantics.
* Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together.
* Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance.
* Python supports modules and packages, which encourages program modularity and code reuse.
* The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.