**Python Assignment**

**Module – 1 (SDLC)**

* **What is Software?**

>> In a computer system, the software is basically a set of instructions or commands that tell a computer what to do. In other words, the software is a computer program that provides a set of instructions to execute a user's commands and tell the computer what to do. For example MS Word, MS Excel, PowerPoint, etc.

* **What are the types of Applications?**

>> An application, also referred to as an application program or application software, is a computer software package that performs a specific function directly for an end user or, in some cases, for another application. An application can be self-contained or a group of programs.

* **What is programming?**

>> Programming refers to a technological process for telling a computer which tasks to perform in order to solve problems. You can think of programming as a collaboration between humans and computers, in which humans create instructions for a computer to follow (code) in a language computers can understand.

* **What is Python?**

>>Python is an interpreter, 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.

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.

**module-2 questions**

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

>> Python makes use of automatic memory management through garbage collection. The garbage collector keeps track of objects and frees memory when they are no longer in use. Python uses reference counting to manage memory, incrementing and decrementing reference counts as needed.

* **What is the purpose continue statement in Python?**

>> The continue statement in Python returns the control to the beginning of the while loop. The continue statement rejects all the remaining statements in the current iteration of the loop and moves the control back to the top of the loop. The continue statement can be used in both while and for loops.

* **What are negative indexes and why are they used?**

>> Negative indexing is used in Python to manipulate sequence objects such as lists, arrays, strings, etc. Negative indexing retrieves elements from the end by providing negative numbers as sequence indexes.