

Module-1 (SDLC)

[Q-1] What is software?

- ❖ Software is a set of instructions, data or programs used to operate computers and execute specific tasks. It is the opposite of hardware, which describes the physical aspects of a computer. Software is a generic term used to refer to applications, scripts and programs that run on a device. It can be thought of as the variable part of a computer, while hardware is the invariable part.
- ❖ The two main categories of software are application software and system software. An application is software that fulfills a specific need or performs tasks. System software is designed to run a computer's hardware and provides a platform for applications to run on top of.
- ❖ Other types of software include programming software, which provides the programming tools software developers need; Middleware, which sits between system software and applications; and driver software, which operates computer devices and peripherals.

[Q-2] What are the types of Applications?

- ❖ An application is a program that runs on a computer, mobile phone/tablet, or through a browser (in this case, you need constant access to the Internet).
- ❖ Although applications are no different from computer programs, this term is usually used to refer to simplified programs intended for the average user (or other programs).
- **There are three types of applications:**
 - computer applications that are placed on the desktop
 - mobile applications for smartphones and tablets
 - internet (web) applications
- **Computer applications:** That are located on the desktop are designed to work with a keyboard, mouse, and full-fledged monitor, so they are more advanced and more convenient to manage (user interaction).
- **Mobile applications:** are easier than computer applications; they are designed to work on a small display using your fingers/stylus. They can be downloaded from Google Play, App Store, etc. Mobile applications can be free (however, they have

Module-1 (SDLC)

advertisements), shareware (when certain functions are available only in paid versions of programs), and paid.

- **Internet applications:** require constant Internet access to exchange information. They can be both computer and mobile.
- The abbreviation “app” is a shortened version of the word "application" that first became popular on Apple and Facebook.
- There are popular online services, such as the App Store and Play Market, that users use to buy, download, install, and manage apps for their devices.

[Q-3] What is programming?

- ❖ Programming is writing code (a set of instructions) to be interpreted and executed by a computer or another electronic device. These instructions can create programs,
- ❖ And tell applications how to operate or function. People who program are referred to as programmer and write their code using a programming language.

[Q-4] 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.