

Module – 1 (SDLC)

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.

Example

- 1 - Application Software
- 2 - System Software
- 3 – Driver Software
- 4 – Programming Software

2 - What are the types of Applications?

- 1 Web Development
- 2. Game Development
- 3 Scientific and Numeric Applications
- 4 Artificial Intelligence and Machine Learning
- 5 Desktop GUI
- 6 Software Development
- 7 Enterprise-level/Business Applications
- 8 Education programs and training courses
- 9 Operating Systems
- 10 Image Processing and Graphic Design Applications:

3 - What is programing?

Programming Style

- Python programs/modules are written as text files with traditionally a .py extension.
- Each Python module has its own discrete namespace.
- Name space within a Python module is a global one.
- Python modules and programs are differentiated only by the way they are called.
- .py files executed directly are programs (often referred to as scripts)
- .py files referenced via the import statement are modules.
- Thus, the same .py file can be a program/script, or a module.

4 - What is Python?

Python is a computer programming language often used to build websites and software, automate tasks, and conduct data analysis. Python is a general-purpose language, meaning it can be used to create a variety of different programs and isn't specialized for any specific problems. This versatility, along with its beginner-friendliness, has made it one of the most-used programming languages today.