**Q1) What is Software? What is Software Engineering?**

**Ans:-**  **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.

**Software Engineering:-**

* It is a branch of engineering that deals with the development of software products.
* It operates within a set of principles, best practices, and methods that have been carefully honed throughout the years, changing as software and technology change.
* The application of a systematic, disciplined, quantifiable approach to the development, operation, and maintenance of software; that is, the application of engineering to software.

Software engineering works on a few different levels:

* **Operational Software Engineering:** Software engineering on the operational level focuses on how the software interacts with the system, whether or not it is on a budget, the usability, the functionality, the dependability, and the security.
* **Transitional Software Engineering:** This type focuses on how software will react when it is changed from one environment to another. It typically takes some scalability or flexibility in the development.
* **Software Engineering Maintenance:** Recurrent software engineering focus on how the software functions within the existing system, as all parts of it change.