# Software Development

* It is that set of actions required in efficiently transforming a user’s needs into an effective software solution.
* It defines the activities required for building the software incorporating the methods and practices to be adopted .
* It also includes the activities essential for planning the project ,tracking its progress and managing the complexities while building software.

# Types of Software Product

* A software product starts its life as an idea or concept.
* Software can be of two types:-

1.Generic Products

2.Customized Products

# Software Development Life Cycle(SDLC)

* The series of steps through which a software product goes through (from conceptualization until retirement) is known as Software development life cycle
* It is the period of time that begins when a software is conceived and ends when the software is no longer available for use
* The SDLC aims to produce high-quality software that meets or exceeds customer expectations, reaches completion within times and cost estimates.

# SDLC

* SDLC typically includes a concept phase ,requirement phase,design phase,implementation phase,test phase,installation and checkout phase,operation and maintenance phase and sometimes retirement phase
* The phase listed above may overlap, be performed iteratively,be combined or be omitted depending upon the software development approach(methodology) used.

# Software Life Cycle Model

* Software life cycle model describes how and in what order the different phases of the software development life cycle are put together to conceive ,design, develop and maintain the software product.
* The most used, popular and important SDLC models are given below:

1.Waterfall model

2.Incremental model

3.Iterative model

4.Agile model

5.Spiral model

6.Prototype model

# Stages in Software Development Life Cycle

1.Analysis

2.Specifications

3.Design

4.Prototyping

5.Coding

6.Testing

7.Implementation

8.Operation

9.Maintenance

