# Software Maintenance

#### Software Maintenance

- Software maintenance is the process of modifying the software that has been given to the customer to use.
- The main purpose of software maintenance is to modify and update the software application after its delivery.
- So that the faults of the software can be corrected and the performance can be improved.
- Software maintenance is a part of the software development life cycle (SDLC).

### Need: Software Maintenance

It is needed for the following reasons:-

- To correct errors or faults.
- To improve the design.
- To implement the enhancements.
- To improve the efficiency of the system.
- To optimize the code, so that the code can run faster.
- To modify components.
- To reduce unwanted side effects.
- To change the requirements of hardware and software.

Its types are as follows:-

1:- Corrective Maintenance -

<u> 2:- Adaptive Maintenance –</u>

3:- Perfective Maintenance -

4:- Preventive Maintenance -

Its types are as follows:-

#### <u>1:- Corrective Maintenance -</u>

- In this, those bugs are fixed which are discovered by the users,
- that is, the problems encountered while using the software are fixed in it.
- And the performance of the software is also increased.

Its types are as follows:-

#### <u> 2:- Adaptive Maintenance –</u>

- In this, the software is updated and modified
- when the software needs to run on a new platform, or operating system.
- That is, in this maintenance the software is kept up to date.

Its types are as follows:-

#### 3:- Perfective Maintenance -

- In this, the software is updated and modified to make the software usable for a long time.
- In this, new features are added based on the needs of the user.
- So that reliability and functionality can be improved.

Its types are as follows:-

#### <u>4:- Preventive Maintenance -</u>

- In this, the software is updated and modified to prevent it from failing in future.
- In this, attention is given to those problems which are not present in the present,
- but may occur in the future.
- It includes the concept of reengineering & reverse engineering.