**4) Software development life cycle (SDLC):**

**ABOUT:**

Software development life cycle (SDLC) is a spiritual model used in project management that defines the stages include in an information system development project, from an initial feasibility study to the maintenance of the completed application.

**Stages:**

* Planning
* Requirement analysis
* Design
* Development
* Testing
* Implementation & maintenance

**Planning:** we will plan how our software should be planning stage (what are the needs to be develop software) software requirement specification (SRS) will be collected will be collected like hardware, software requirements.

**Requirement** **analysis:** functional&non**-**functionalrequirements, existing system analysis & required features analysis are done here.

**Design:** before coding, we will draw diagrams, directly we will not proceed with development. Diagrams are drawn either using paper & pen etc…mainly used data flow diagram, ER diagram.

**Development:** after designing coding part we will proceeded by splitting the software into modules.

**Testing:** developed software will be tested using manual or automation testing.

**Implementation & maintenance:** developed software will be used in real time.

**Models:**

There are seven types of SDLC models;

* Waterfallmodel
* RAD model
* Spiral model
* V-model
* Incremental model
* Agile model
* Iterative model