

# Software Engineering Assignment

## MODULE: 1

1. What is software? What is software engineering?

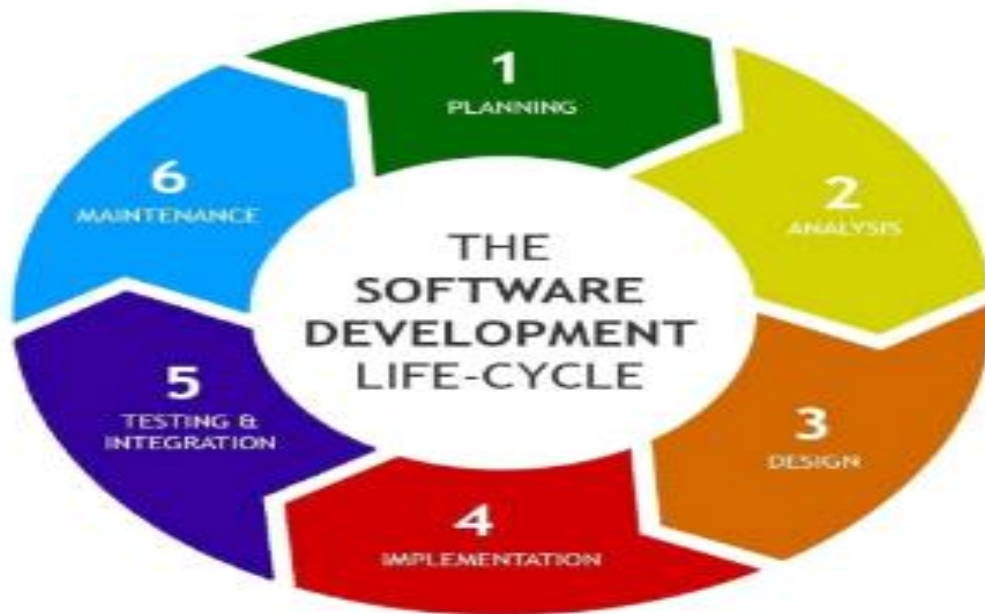
- Software is a set of instructions that tell a computer what to do. **Software engineering** is the process of designing, developing, testing, and maintaining software to ensure it's reliable and efficient.

2. Explain types of software.

- **System Software:** Manages hardware and provides basic functionalities (e.x., operating systems).
- **Application Software:** Helps users perform tasks (e.x., word processors, web browsers).
- **Programming Software:** Tools to create software (e.x., compilers, debuggers).

3. What is SDLC? Explain each phase of SDLC.

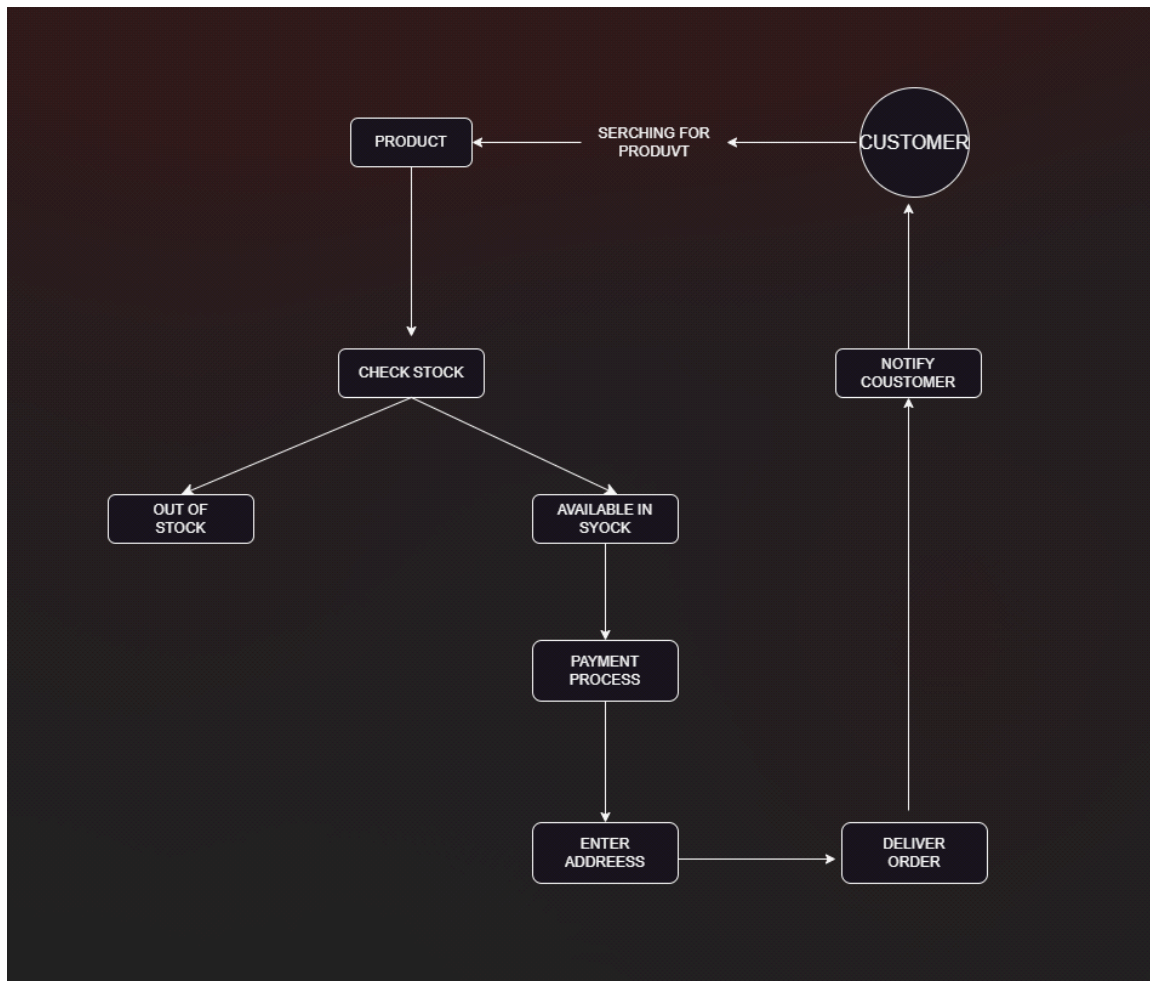
- **SDLC (Software Development Life Cycle)** is a process used to develop software. It has 6 phases:
- **Requirements** : Gathering and documenting what the software should do.
- **Design**: Creating a blueprint of how the software will be structured and function.
- **Implementation**: Writing the code and building the software.
- **Testing**: Checking if the software works correctly.
- **Deployment**: Releasing the software for users.
- **Maintenance**: Updating and fixing issues in the software after release.



4. What is DFD? Create a DFD diagram on Flipkart

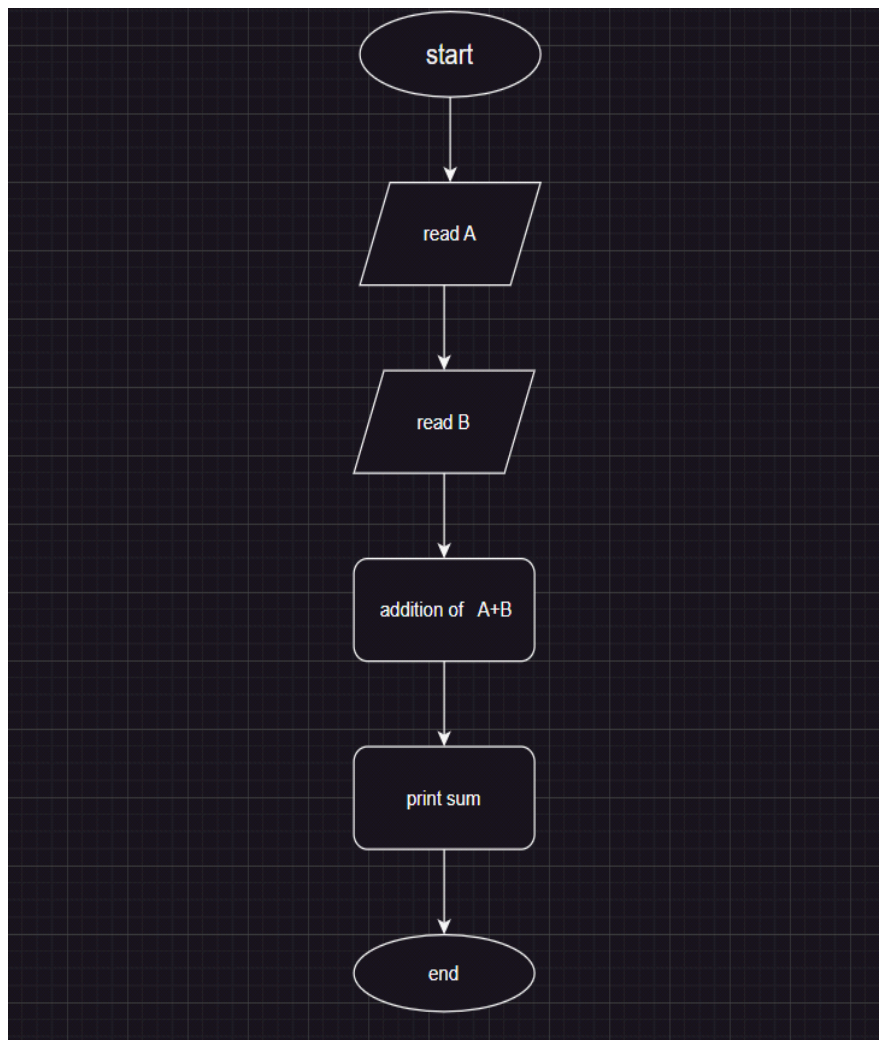
- **DFD (Data Flow Diagram)** shows how data moves through a system.

## DFD diagram on Flipkart



5. What is Flow chart? Create a flowchart to make addition of two numbers

- **Flowchart:** A flowchart is a visual representation of a process or algorithm using symbols connected by arrows showing the sequence of steps. Here's a simple flowchart for adding two numbers



6. What is Use case Diagram? Create a use-case on bill payment on paytm.

- **Use Case Diagram:** A use case diagram illustrates how users interact with a system and its functions.

