

1. What is software? What is software engineering?

- Software:
- Software is used to control a computer.
- different types of software that can run on a computer: system software, utility software, and application software.
- Software engineering:
- Software engineering is the branch of computer science that deals with the design, development, testing, and maintenance of software applications.

2. Explain types of software.

- 5 types of software
- 1. Application Software
- 2. System Software
- 3. Drive Software
- 4. Middleware
- 5. Programming Software

- 1. Application Software:
- The most common type of software.
- Application software is a computer software package that perform a specific function for a user or in some case for another application
- Example: Microsoft office, Powerpoint, etc..
- 2. System Software:
- System software programs are designed to run computer's application program and hardware.
- Example: notepad, calculator, etc..
- 3. Drive software:
- Drive software is also known as device drivers.

- It is perform specific task.
- Example: Audio drive, Video drive.
- 4.Middleware;
- Middleware is software that lies between operating system and the application running on it.
- Example: IOS, Database Middleware.
- 5.Programming software:
- Computer programmers use to programming software to create a code.
- Example: Tarbo c , sublime, etc...

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

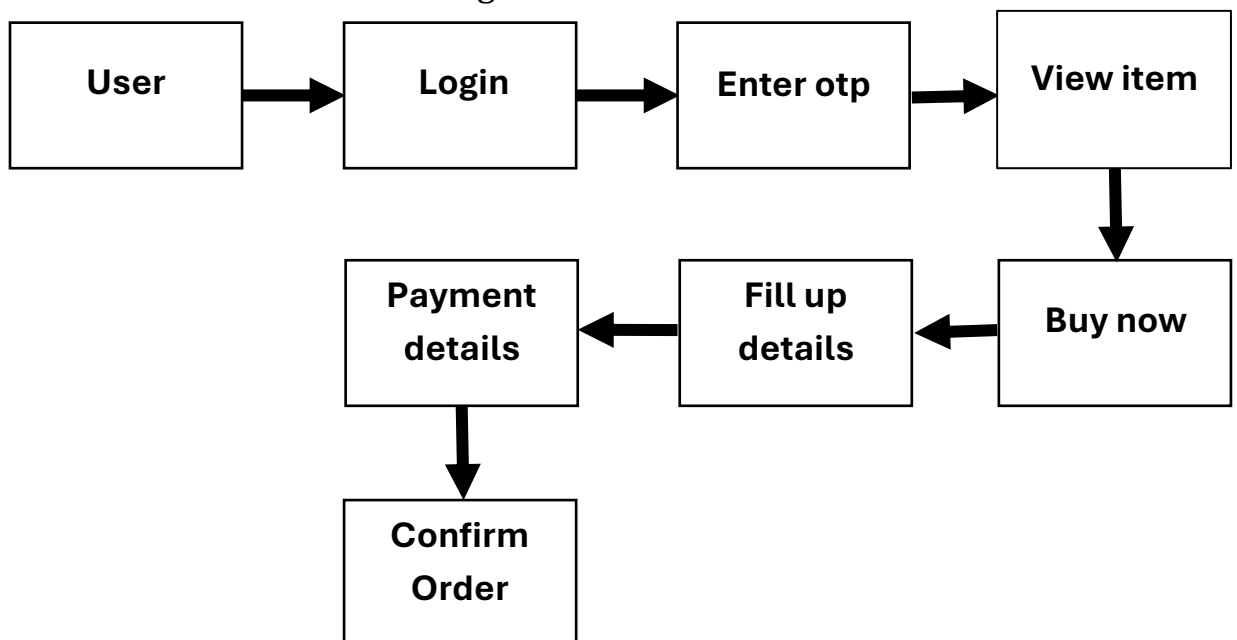
- SDLC stand for Software Devlopment Life Cycle.
- It is refers to methodology with clearly defined processes for creating high quality software
- Phase of SDLC.
- 1.Plannig
- 2.Analysis
- 3.Design
- 4.Implemtation
- 5.Testing
- 6.Maintanance

- 1.Planning:
- This phase is the most fundamental in the **SDLC process**
- This is the initial phase where project goals, scope, and feasibility are determined.
- 2.Analysis:

- Business requirements are compiled and analyzed by a business analyst, domain expert, and project manager.
- 3.Design:
 - The system architecture is designed based on the requirements.
 - This includes deciding on system components, data flows, databases, and user interfaces.
- 4.Implementaion:
 - Convert the system design into actual code by developers.
- 5.Testing:
 - Identify and fix defects in the software to ensure it meets the quality standards and user requirements.
- 6.Maintanance:
 - In a post-production, live software environment, the system is in maintenance mode.

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

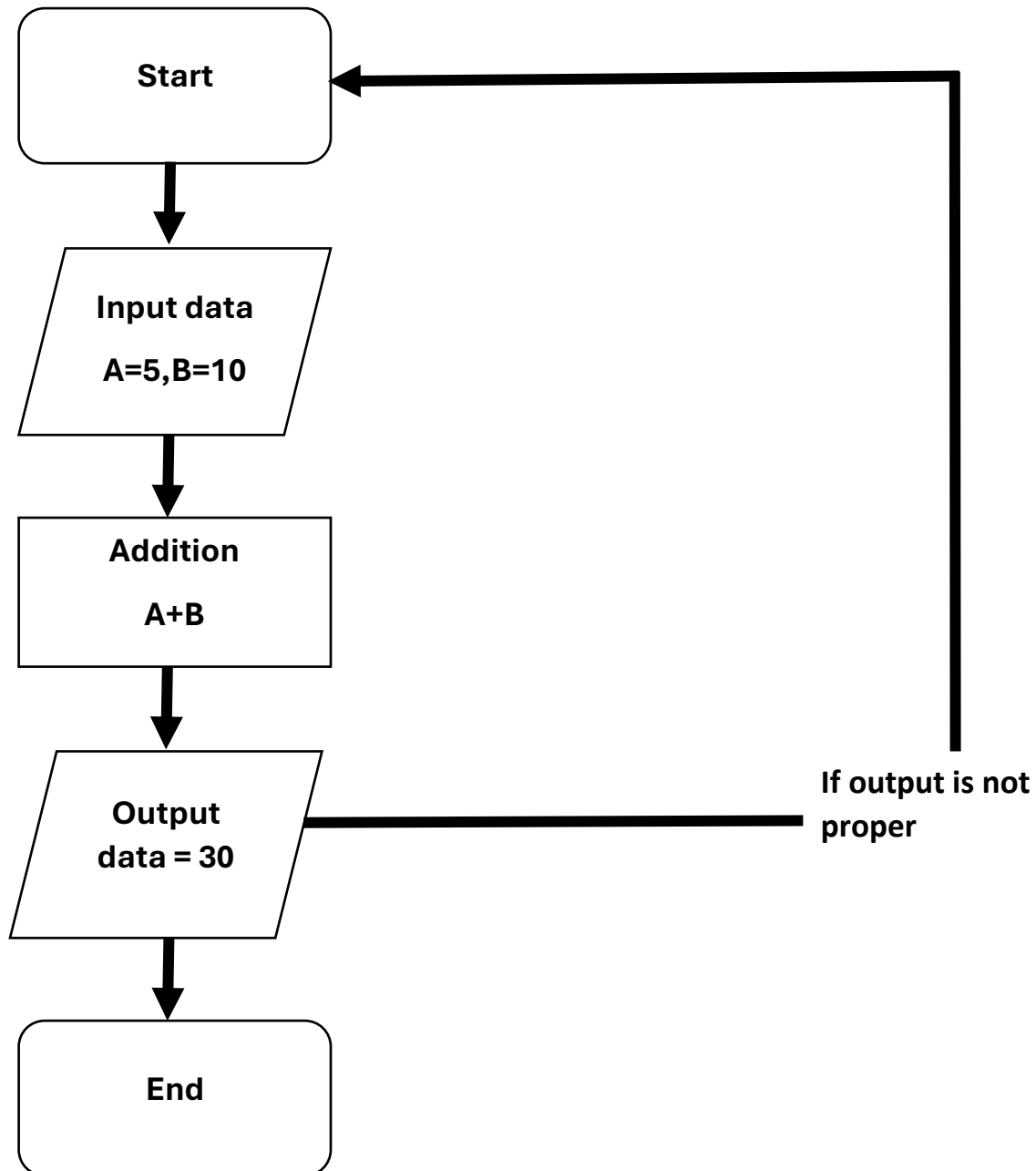
- DFD stands for Data Flow Diagram.



- DFD is a diagram being used frequently in software design

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

→ A flowchart is a diagram that illustrates the steps, sequences, and decisions of a process or workflow.



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

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

