ASSIGNMENT

MODULE: 1 (SDLC)

Q.1 : What is software? What is software engineering?

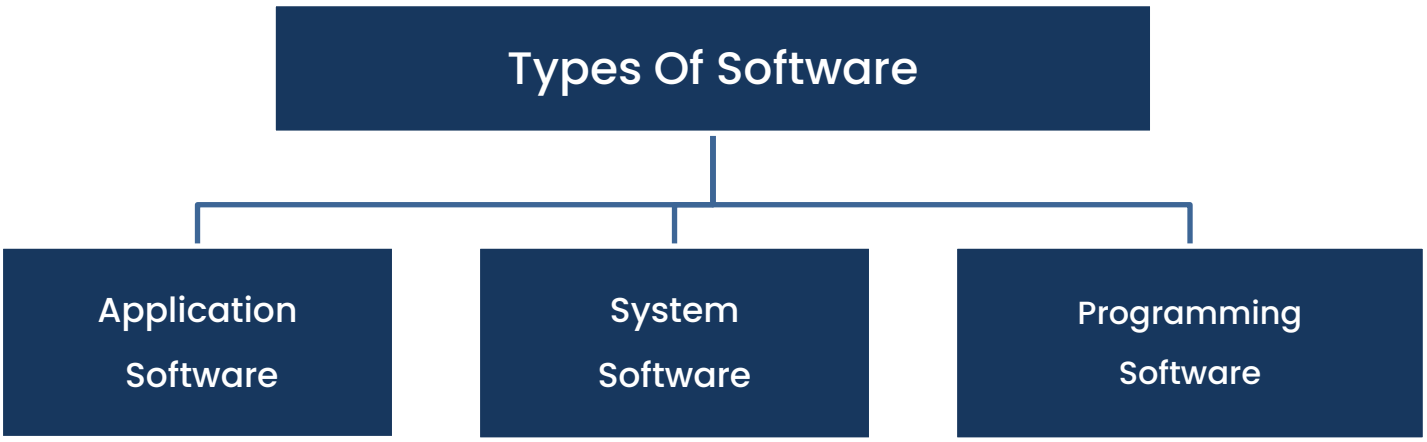
Ans:

➔ **Software** is a set of instructions, data or programs used to operate computers and execute specific tasks.

➔ **Software Engineering** is the process of designing, developing, testing, and maintaining software.

Q.2 : Explain types of software.

Ans:



1) Application Software :

➔ Application software is a software program or group of programs designed for end-users.

➔ Examples of Application Software Microsoft Office, Paint, PowerPoint etc.

2) System Software :

➔ System software is a computer program that helps the user to run computer hardware or software and manages the interaction between them.

➔ Example for System Software includes Android, Mac Operating system, MS Windows, etc.

3) Programming Software :

➔ Programming is the process of designing, writing, testing, debugging, and maintaining the source code of computer programs.

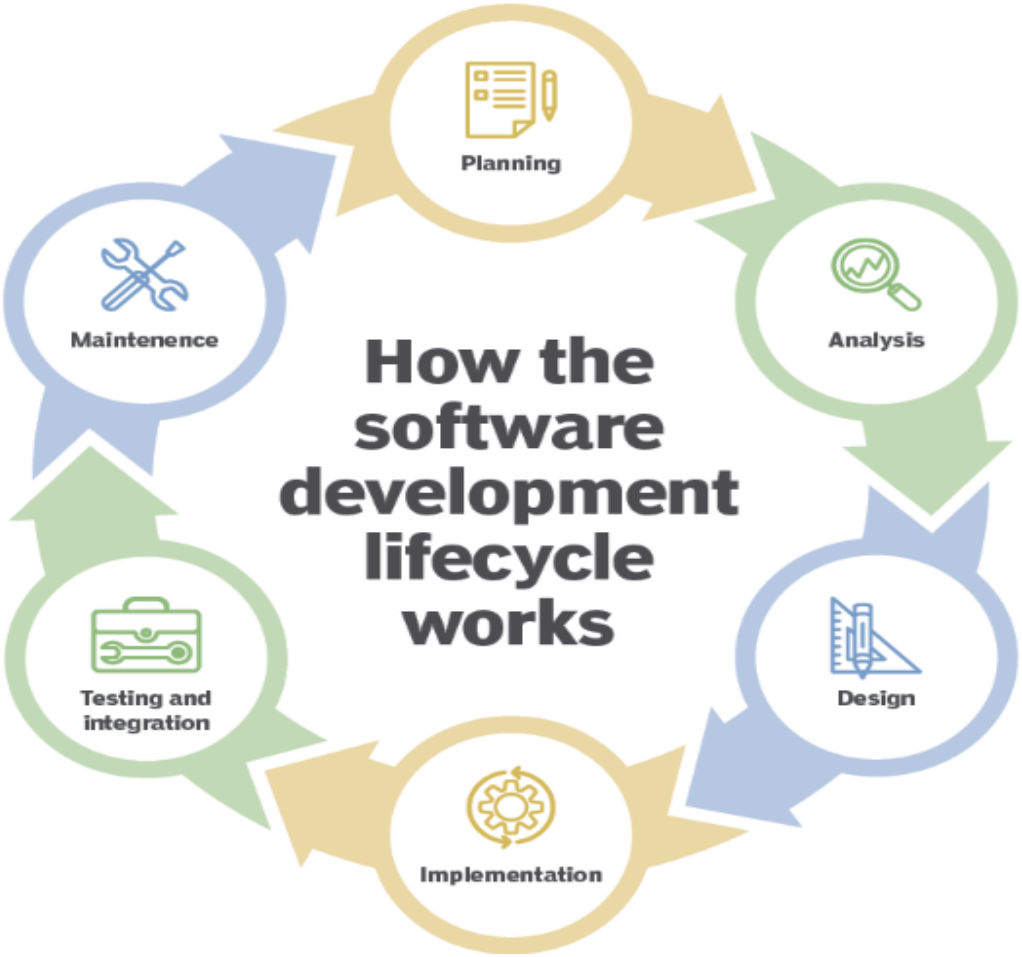
➔ This source code is written in a programming language.

➔ Examples : Turbo c, Eclipse, Sublime etc.

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

Ans:

➔ **SDLC (Software Development Life Cycle)** includes a plan for how to develop, alter, and maintain a software system.



1) Planning And Analysis :

➔ The planning phase typically includes tasks like cost-benefit analysis, scheduling, and allocation.

➔ The development team collects requirements from several stakeholders such as internal and external experts, managers to create a software requirement specification document.

➔ The document sets expectations and defines common goals that aid in project planning.

2) Design :

➔ In the design phase, software engineers analyze requirements and identify the best solutions to create the software.

3) Implementation :

➔ In the implementation phase, the development team codes the product.

➔ The programming code is generated during this stage.

4) Testing & Integration :

➔ The development team combines automation and manual testing to check the software for bug.

➔ Quality analysis includes testing the software for errors and checking if it meets customer requirements.

5) Maintenance :

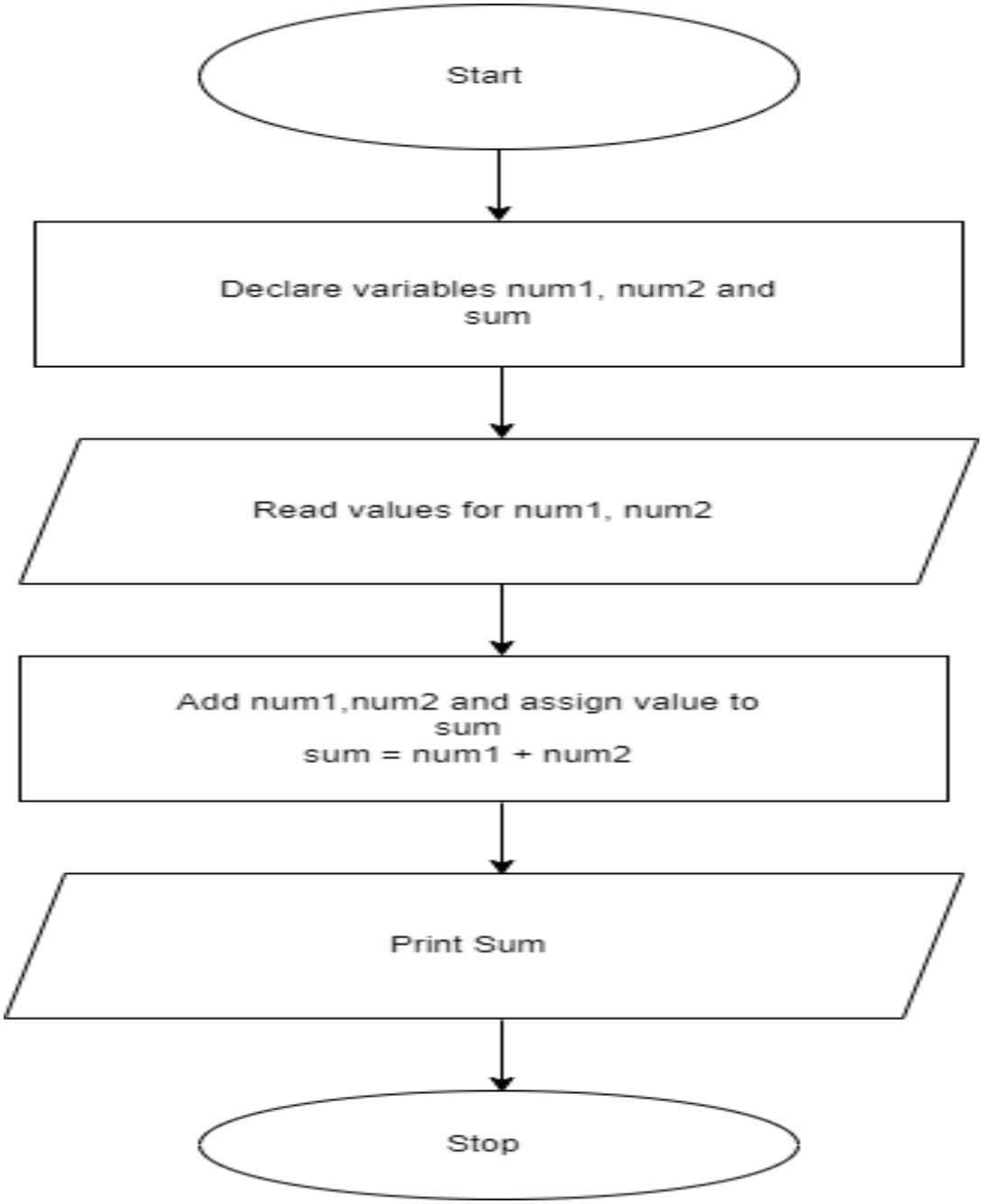
➔ Once the product is tested and ready to be deployed it is released formally in the appropriate market.

➔ After the product is released in the market, its maintenance is done for the existing customer base.

Q.4 : What is Flow chart? Create a flowchart to make addition of two numbers.

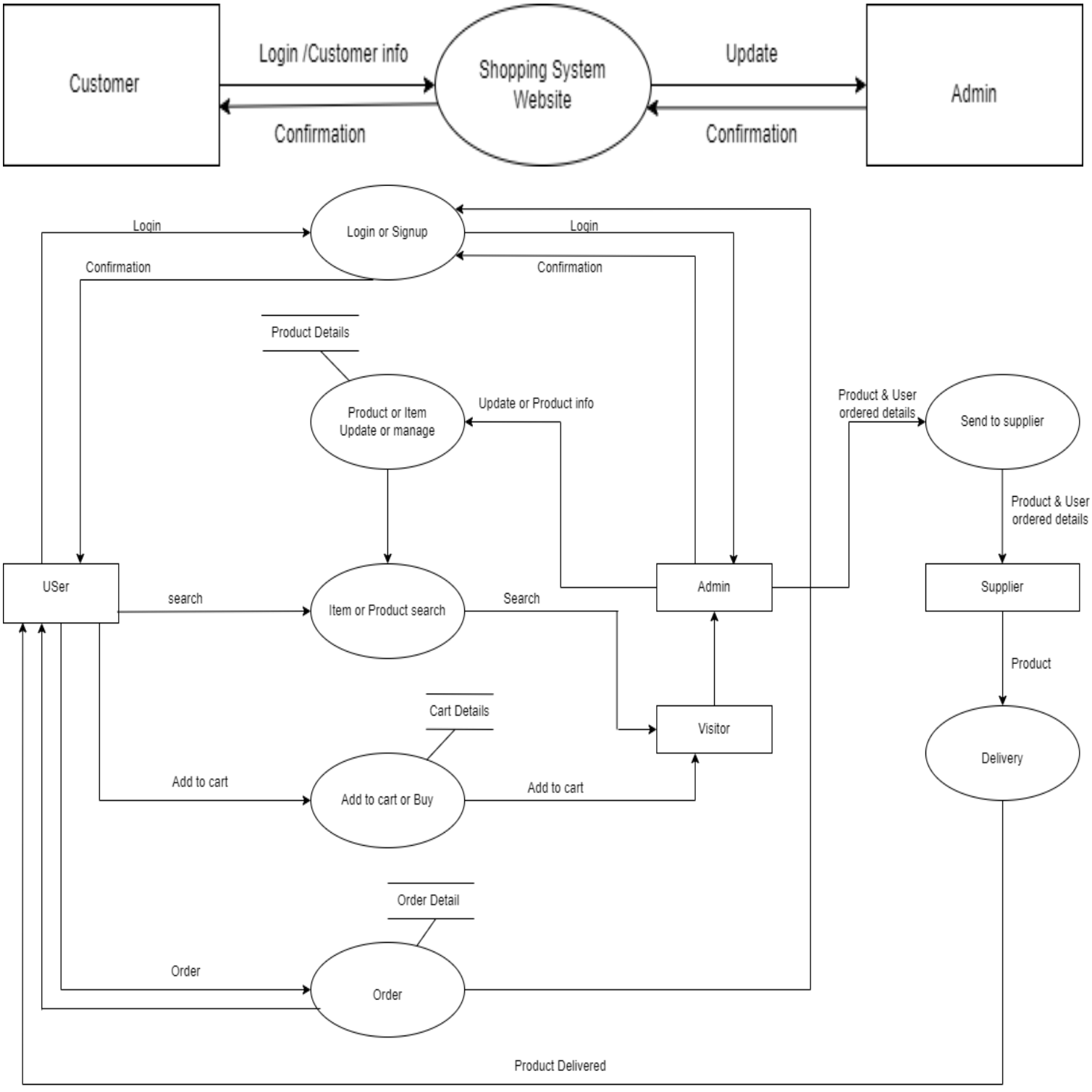
Ans:

➔ A flowchart is a type of diagram that represents a workflow or process.



Q.5 : What is DFD? Create a DFD diagram on Flip kart.

Ans: A data-flow diagram is a way of representing a flow of data through a process or a system.



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