MODULE-1-SE

1.What is software? what is software engineering?

Software is a set of instruction, data or program used to operate computer and execute specific task.

Software engineering:

Software engineering is the branch of computer science that deal with design development testing maintenance of software application.

2.Explain types of software?

Mainly 3 Types of software

1.System software

2.Application software

3.Utility software

1.System software: -Type of software that designed for providing a platform to other software.

Example of system software include operating system like macOS, Linux, android.

2.Application software: -Application software that fulfil specific needs or perform task.

Example of application software that is used on a personal computer or laptop.

3.Utility software: -It helps to manage, maintain & control computer resource.

 Example of utility programs are antivirus software, backup software &disk tools.

3.What is SDLC? explain each phase in SDLC

The software development life cycle is cost effective & time efficient process that development terms that used to design & build high quality software.

Planning: -The phase SDLC project panning stage where you are gathering business requirement from your client. Evaluate the feasibility of creating the project.

Analysis: -Information gathered during the planning & analysis phase into the clear requirement for the development team.

Design: -The design phase will include the development of a protype. software design document that includes system design, programming language.

Coding/Implementation: -Development team member divides the project into software modules & turn the software requirement into code that make the product.

Testing: -The process of executing a program or part of a program with the intension of finding error.

1.Manual Testing: -It is perform the tests step by step without help of tool.

2.Automation Testing: -Tests are execute automatically using automation tools & frameworks
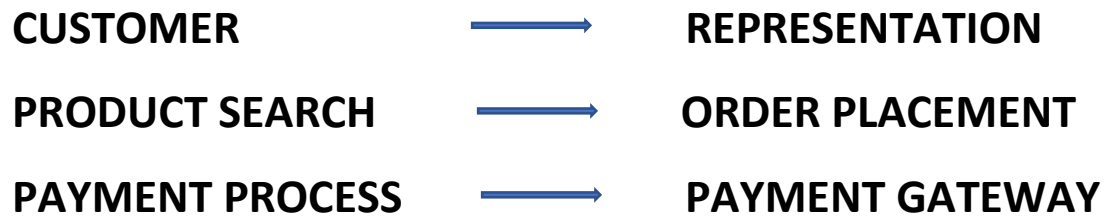
Deployment: -This phase is the final step in the software development life cycle & delivers the final product to the customer in a live production environment.

Maintenance: -Occurs after the product is in full operation. It can include software upgrades, repair & fixes of the software if it breaks.

4.What is DFD? Create DFD diagram on flipkart?

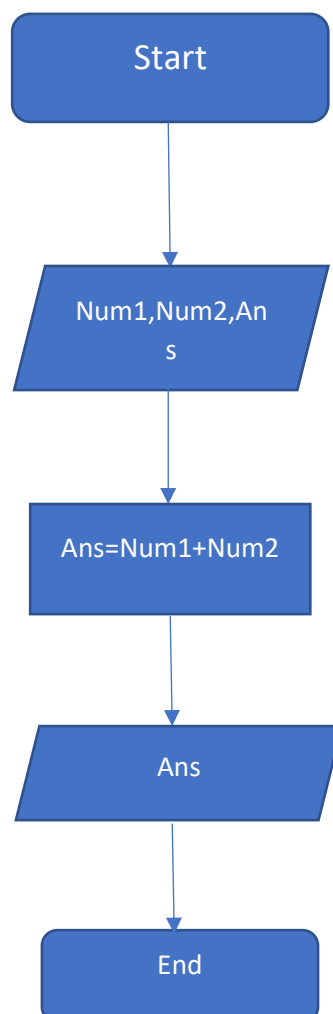A data flow diagram is graphical or visual representation using a standardized set of symbols.

<u>DFD diagram on flipkart</u>: -

CUSTOMER	⟶	REPRESENTATION
PRODUCT SEARCH	⟶	ORDER PLACEMENT
PAYMENT PROCESS	⟶	PAYMENT GATEWAY

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

A flow chart is a picture of the separate steps of a process in sequential order.

Flow chart Addition of two number:

```
        ┌──────────────┐
        │    Start     │
        └──────┬───────┘
               │
               ▼
        ╱──────────────╱
       ╱ Num1,Num2,An ╱
      ╱       s      ╱
     ╱──────────────╱
               │
               ▼
        ┌──────────────┐
        │ Ans=Num1+Num2│
        └──────┬───────┘
               │
               ▼
       ╱──────────────╱
      ╱     Ans      ╱
     ╱──────────────╱
               │
               ▼
        ┌──────────────┐
        │     End      │
        └──────────────┘
```

6.What is usecase diagram? Create a usecase on bill payment on Paytm?

Describe the high-level function & scope of the system. These diagrams also identify the interactions between the system & its user.

Use case on bill payment on Paytm:

USER: -

➡ **REGISTRATION**

➡ **SELECT BILL TYPE**

➡ **BILL DETAILS**

➡ **PAYMENT METHOD**

➡ **PAYMENT GATEWAY**

➡ **PAYMENT PROCESS**

➡ **PAYMENT CONFIRMATION**