Module : 1
SE – Overview of IT Industry

1. What is software? What is software engineering?

Software is a set of program.

Software engineering is a field of a computer branch. Software Engineering develops softwares using various programming Languages.

2. Explain types of software

There are two types of software:

1. System software : operating system , device drivers are system software.

2. Application software : whatever applications we download from the web like Microsoft offices, antivirus, any of the games etc are the application software.

3. What is SDLC? Explain each phase of SDLC

SDLC : Software Development Life Cycle

1. Analysis : Before developing the software market analysis is must needed because we have to know that what people demanding and expecting from our software.

2. Planning : At planning stage we try to understand key points of the software we are developing, what software is going to solve, what are the software specification, functions, timeline, neccessary recourses etc.

3. Designing : Before staring of coding we will prepare proper prototype of the software. It's user interface, functionality, database designing, structure of the software.

4. Development : This is the coding stage where we start developing using. Various programming languages and various frameworks.

5. Testing : After development of the software testing team will test the software to clarify that the software has no bugs and is ready to deploy and if they finds any bugs the development team will correct and again testing will happen and if there is no bug then the software is ready to deploy.

6. Deploy : After deploying the software , software is user ready and is available publicly.

7. Maintenance : This is the last stage of SDLC. After deployment its not the end the main thing is to maintain and update software on a regular basis. Maintaining software means fixing bugs, create new features, offering help to users, solving difficulties.
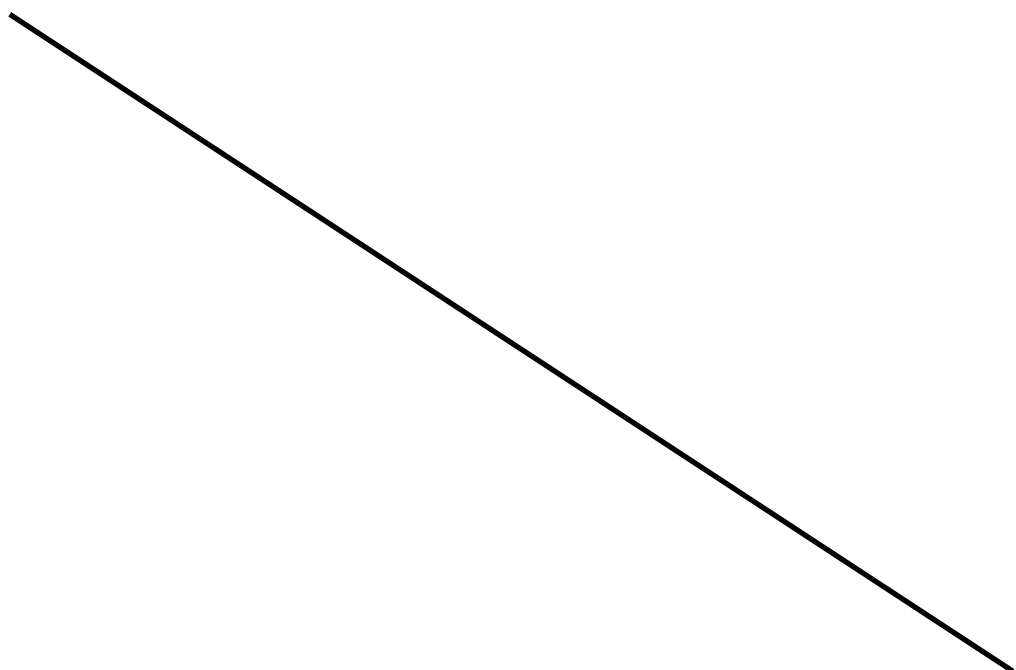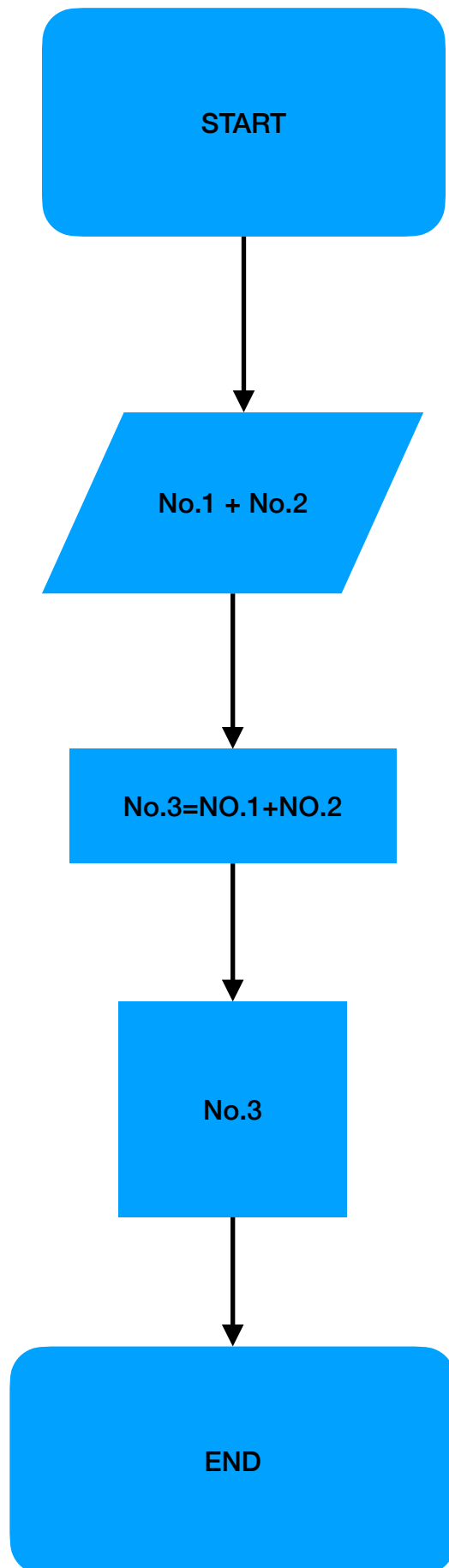
4. What is DFD? Create a DFD diagram on Flipkart

DFD : Data Flow Diagram

User   --->   Registration

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Product Search --->   Product confirm

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Payment Process <--- Payment Method

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

Flowchart is a pictorial or graphical representation of a process. Each step in the process is presented by different symbol. The flowchart symbols are linked together with arrow.

```
START
```

```
No.1 + No.2
```

```
No.3=NO.1+NO.2
```

```
No.3
```

```
END
```

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

Use case diagram is the interaction between system and the user.

```
User    ---> Login
        ----------------
        payment type
        ----------------
        bill details
        ----------------
        payment method
        ----------------
        payment gateway
        ----------------
        payment Process
        ----------------
        payment Conformation
        ----------------
```