**1)What is software? what is software engineering?**

**=> Software is that part of computer which**

**we cannot touch physically.**

**=> software engineering is the process of**

**developing computer application or websites**

**to solve real world problems.**

**2)Explain the types of software?**

**=> There are five types of software**

**1) Application Software :- it is a computer software package that performs the specific function for a user, or in some cases for another computer application. Ex- Image and Video editor, word processors and communication platform etc.**

**2) System Software :- it is a program designed to run a computer's application program and hardware. Ex- windows, Linux, mac OS etc.**

**3) Driver Software :- it is also knows as device drivers, it is a type of software that lets the operating system and a device communicate with each other. Ex- audio driver, video driver etc.**

**4) Middleware :- The software that meditates between application and system software or between two different kinds of application software. Ex- database, application server etc.**

**5)Programming Software :- Programming software enable developers to develop, write, test and debug other software program. Ex-Visual studio code, notepad++ etc.**

**3)What is SDLC? Explain each phases of SDLC?**

**=>SDLC stands for software development life cycle and it has six phases.**

**1)Requirement gathering :- it is the first phase of SDLC in which we identifying the requirement or needs to build a software.**

**2)Analysis :- it is the second phase of SDLC where we analyse the gathered requirements.**

**3)Designing :- it is the third phase of SDLC where we design or plan the look of software.**

**4)Implementation or coding :- it is the fourth phase of SDLC in which we develop backend of software.**

**5)Testing :- it is the fifth phase of SDLC where we test and debug our developed software.**

**6)Maintenance :- it is the sixth phase of SDLC where we have to update and fix errors with time in developed software.**

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

**=>DFD Stands for data flow diagram. It is used to represent the flow of data graphically in an information system.**

**=>By using DFD we can easily understand the overall functionality of system because diagram represents the incoming data flow, outgoing data flow and stored data in a graphical form.**

**=>It describes how data is processed in a system in term of input and output.**

**=>DFD uses a number of symbol to represent flow of data :-**

**1. External entity :- Entity are object of the system. A source or destination data of a system.**

**2. Data Flow :- Data flow are pipelines through the packets of information flow.**

**3. Process :-  A Process or task performed by the system**.

**4. Data Store :- A place where data to be stored**.

**DFD diagram on Flipkart**

1. **0 – level DFD**

**FLIPKART**

**Request for login**

**Request for registration**

**Response**

**Response**

**ADMIN**

**USER**

**1st – level DFD**

**ITEMMST**

**USER**

**USERMST**

**USERMST**

**USERMST**

**ITEMMST**

**PAYMENTMST**

**ORDERMST**

**2ND level DFD**

**CHECK DETAIL**

**REQUEST TO LOGIN**

**USERMST**

**USER**

**RESPONSE**

**REPLY**

**REQUEST FOR VIEW**

**ITEMMST**

**REPLY**

**UPDATE CART**

**ORDERMST**

**REPLY**

**REUQEST ORDER**

**ORDERMST**

**REPLY**

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

**A flowchart is a diagram that shows an overview of a program.**

**START**

**Input Number1,**

**Number2**

**Sum= Number1 + Number2**

**END**

**Print Sum**

**6. What is a Use Case diagram? Create a use case on bill payment on paytm?**

**A use case diagram is a graphical depiction of a user's possible interactions with a system. A use case diagram shows various use cases and different types of users the system has and will often be accompanied by other types of diagrams as well.**

**DIRECT USER**

**USER**

**VISITOR**

**SERVICE PROVIDER**

**THIRD PARTY SYSTEN ADMINSTRATOR**

**REGISTERED USER**