1. Why do computers understand only binary language?

Ans - Computers use binary to store data. Not only **because it's a reliable way of storing the data**, but computers only understand 1s and 0s — binary. A computer's main memory consists of transistors that switch between high and low voltage levels — sometimes 5V, sometimes 0.

1. What is the full form of IDE?

Ans - An **integrated development environment** (IDE) is software for building applications that combines common

developer tools into a single graphical user interface (GUI).

1. What is the difference between a text editor and a code editor?

Ans - A text editor simply allows you to write and edit text and it does not have anything built in to help you to code

whereas a code editor is also a text editor but it also helps you write code.

1. What are the steps to develop software using the C language?

## Ans - Problem Definition

Here, we define the problem statement and decide the boundaries of the problem.

In this phase, we need to understand what is the problem statement, what is our requirement and what is the output

of the problem solution. All these are included in the first phase of program development life cycle.

Problem Analysis

Here, we determine the requirements like variables, functions, etc. to solve the problem. It means that we gather the

required resources to solve the problem, which are defined in the problem definition phase. Here, we also determine

the bounds of the solution.

Algorithm Development

Here, we develop a step-by-step procedure that is used to solve the problem by using the specification given in the

previous phase. It is very important phase for the program development. We write the solution in step-by-step

statements.

Coding & Documentation

Here, we use a programming language to write or implement the actual programming instructions for the steps

defined in the previous phase. We construct the actual program in this phase. We write the program to solve the

given problem by using the programming languages like C, C++, Java, etc.

Testing & Debugging

In this phase, we check whether the written code in the previous step is solving the specified problem or not. This

means, we try to test the program whether it is solving the problem for various input data values or not. We also test

if it is providing the desired output or not.

Maintenance

In this phase, we make the enhancements. Therefore, the solution is used by the end-user. If the user gets any

problem or wants any enhancement, then we need to repeat all these phases from the starting, so that the

encountered problem is solved or enhancement is added.

1. Explore by your own
2. What is the latest version of C Language?

Ans - Published in June 2018 as ISO/IEC 9899:2018, **C17** is the current standard for the C programming

language.

1. Who developed C Language?

Ans - C is a general purpose- computer programming language. It was created in the 1970s by  **Dennis Ritchie.**

1. What is the difference between System and Application Software?

Ans - The system software is used for operating computer hardware. On the other hand

Application software are installed according to user's requirements.

d. How to convert a number from a decimal number system to a binary number

system?

Ans - 1. Write down the number.

2. Divide it by 2 and note the remainder.

3. Divide the quotient obtained by 2 and note the remainder.

4. Repeat the same process till we get 0 as the quotient.

5. Write the values of all the remainders starting from the bottom to the top.