Assignment : 1

1. Why do computers understand only binary language ?

Ans . It is because binary is a machine language which has 0 and 1, means it records the data in form of 0 and 1 as electric signal. Computer is a electronic device. It made more sense to only distinguish between an "on" state—represented by negative charge—and an "off" state—represented by a positive charge.

2. What is the full form of IDE ?

Ans . The full form of IDE is" integrated development environment".

3. 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 to write a code.

4. What are the steps to develop software using c language ?

Ans. Step 1: Make the source code (.c file)

Step 2: Build a software-

- Preprocessor
- Compiler
- Linker

Step 3: Now the soure file is converted into software executable file (.exe).

5. A. What is the latest version of C language ?

Ans C17 published in june 2018 .

B. Who developed C language ?

Ans . Dennis Ritchie .

C. What is the difference between system and application software ?

System Software	Application Software
• System software are mainly designed for managing system resources.	• Application software are designed to accomplish tasks for specific purposes.
• Programming of system software is complex.	• Programming of application software is comparatively easy.
• A computer cannot run without system software.	• A computer can easily run without application software.
• System software do not depend on application software.	• Application software depend on system software and cannot run without system software.

D. How to convert a number from a decimal to a binary number system ?

Ans The decimal number system is a number system that represents a number with a base of 10 and uses 10 symbols - 0, 1, 2, 3, 4, 5, 6, 7, 8, and 9.

The binary number system is a number system with base 2 in which numbers are represented only by two digits, 0 and 1.

- **Step 1:** Divide the given decimal number by 2 and note down the reminder.
- **Step 2**: Now, divide the obtained quotient by 2, and note the remainder again.
- **Step 3:** Repeat the above steps until you get 0 as the quotient.
- **Step 4:** Now, write the remainders in such a way that the last remainder is written first, followed by the rest in the reverse order.
- **Step 5:** This can also be understood in another way which states that the Least Significant Bit (LSB) of the binary number is at the top and the Most Significant Bit (MSB) is at the bottom. This number is the binary value of the given decimal number.

- **Example :**