**Assignment 1**

1. **Why do computers understand only binary language?**

**Ans-** Because computer is made up of hardware and it uses capacitor which is either charged or uncharged. So, when the capacitor is charged, it is considered as 1 and when the capacitor is uncharged, it is considered as 0. Therefore, computer only understands the binary language which is 1s and 0s.

1. **What is the full form of IDE?**

**Ans-** Integrated Development Environment

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

**Ans-** Text editor allows the user to just write and edit text whereas, code editor is a text editor with built-in features for developers to work on or edit the source code.

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

**Ans-** Step 1: Create a Source file containing source code (coding in C)

Step 2: Build Process (preprocessor, compiler, linker – converts source code into binary language)

Step 3: Software executable file is created.

1. **Explore by your own**

* **What is the latest version of C Language?**

**Ans-** C17, introduced in 2018.

* **Who developed C Language?**

**Ans-** Dennis Ritchie

* **What is the difference between System and Application Software?**

**Ans-** System software manages resources and helps to run hardware and application software which is essential for the functioning of a system (Ex. Operating System). Application software performs a specific task according to their type and only runs when the user requires it (Ex. Web Browser).

* **How to convert a number from a decimal number system to a binary number system?**

**Ans-** Divide the given no. say 13 repeatedly by 2 until quotient becomes 0.

13/2=6 (remainder 1), 6/2=3(remainder 0), 3/2=1(remainder 1), 1/2=0(remainder 1) -> 1011

Write the remainder in reverse order and the binary of 13 is received 1101.