Assignment-1 C Language Live Community Classes MySirG

1. Why do computer understand only binary language?

Ans: Computer is an electronic device and it uses 0 and 1 to store data, it is designed in such a way so that when there is some charge it corresponds to 1 and no charge it corresponds to 0. Thus 0 and 1 i.e. binary is the machine language. Data is stored in computer main memory which consists of millions of transistors as 1 and 0, when there is some charge for example 3V or 5V corresponds to 1 and no charge corresponds to 0.

1. What is the full form of IDE?

Ans: Integrated Development Environment.

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

Ans: A text editor is a program where we can type and edit codes or any text matter whereas a code editor is a program where we can type and edit programming language codes. A code editor understands programming language codes and shows different tokens or programming language elements in different color coding, it is easier to use code editor for any programming purpose.

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

Ans: First we need to decide what program we have to develop then we will have to code the program in an IDE or code editor and build the program using preprocessor, compiler and linker, after that we will get the .exe file of the program.

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

Ans: C17 is the latest version however working draft of C23 is released in April 1 2023. Soon C23 will replace C17.

1. Who develop C language?

Ans: Dennis M. Ritchie develops C language at AT&T Bell Laboratories.

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

Ans: A system software is a program which controls and maintains computer resources such as memory, hard disk etc. while working in a computer, through system software we can communicate with a computer whereas application software is a program for a specific task such as word program for typing and editing word documents, calculator, photo editor etc.

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

Ans: In order to convert the decimal number to binary number we will have to divide the given decimal number by 2 as 2 is the base of binary number system. The steps are given below –

* First divide the given decimal number by 2
* If the given decimal number is even then the result will be whole and it will give ‘0’ reminder.
* If the given decimal number is odd then it will not be divided properly and it will give ‘1’ as reminder.
* Then arrange the reminders from bottom to top and we will get the binary number.

For example – Let us convert the given decimal number 10 into binary number

|  |  |  |  |
| --- | --- | --- | --- |
| Divide by 2 | Result | Reminder | Binary value |
| 10 | 5 | 0 | 0 |
| 5 | 2 | 1 | 1 |
| 2 | 1 | 0 | 0 |
| 1 | 0 | 1 | 1 |

Therefore the equivalent binary number of the decimal number 10 is 1010.