Assignment – 1 C Language LIVE Community Classes

Q1. Why do computers understand only binary language?

Ans: In a computer system all hardware's have either capacitors or registers were implemented during their manufacture.

Capacitor is a type of electronic circuit in where either the electric charge stored in form of "0" or "1". If the value is "0" it means in that capacitor there is no charge. If the value is "1" it means in that capacitor there is charge is available.

Register is a type of electronic circuit which is built by flipflop. In flipflop you can only store only one bit either "0" & "1".

In hard-disk the data stored in magnetic form in hard-disk there are two poles north and south pole is there. the north and south pole are either 0 and 1. If the value is "0" then there is no data if the value is "1" then data is available.

In above three statement we can observe that in computer system all the hardware's the data are stored either in "0" form or in "1" form and 0 & 1 are the binary number system where the values are converted in 0 & 1 form. That's why computer system understand only binary language.

Q2. What is the full form of IDE?

Ans: IDE stands for "Integrated Development Environment".

Q3. What is the difference between a text editor and a code editor?

Ans: Text editor is a application software where you can write any type of text statement. A text editor can be used to write any type of programming language like C, C++, JAVA, Python, HTML, CSS, and many more. In a text editor you can write any type of programming language and if you save that text file using a particular programming language extension, then the file will behave like that programming language source file.

A code editor is an application software which was made by a developer for writing a specific programming language. In a code editor we can write only one type of programming language.

Q4. What are the step to develop software using the C language?

Ans:

Step 1: Write a C source code in any IDE

Step 2: Save the code in "Filename.c".

Step 3: click the build option.

Step 4: After click on the build option the source file will debug to find error from the source file.

Step 5: Click on the compile option for compilation.

During compile of the source code first the source code go to the preprocessor where the source code and header file are separated and the high-level language code saved as “Filename.i”. After creation of the preprocessor file compiler convert that file into “Filename.obj” the object file which contains only 0 & 1. After creation object file it connected to the linker and also the library files connected to linker and using those object file and library files linker creates the “Filename.exe” file which is a executable file.

So this is the steps for developing software using C language.

Q5. Explore by your own

a. What is the latest version of C Language?

Ans: C17 is the latest version of C Language.

b. Who Developed C Language?

Ans: Dennis Ritchie Developed C programming language in 1972 at AT&T’s Bell LABs, USA.

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

Ans: System Software are the software which are directly interact to the system but not user. All the device drivers and the Operating systems are the example of System Software. Application Software are the software which are directly interact to the user. MS Office, Calculator, Text Editor all are the example of Application Software.

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

Ans: To convert decimal number system to binary number system these are the following steps

Step1: divide the decimal number into two parts decimal part and floating part

Step2: to convert the decimal part to binary number find the LCM and the reminder from bottom to top are the answer of decimal part of the binary resultant

Step3: to convert the floating part to binary number multiply the number with 2 and what ever the output will generate just take the decimal part as a result, and repeat the multiplication and the from result from top to bottom collect the decimal part and you will find the resultant output.

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