Introduction to C Language | C Programming

We will discuss how that language how that program will be converted into zero and when and then computer will perform your task fine. We need programming languages to communicate with each other and to interact with computers. For communication what first of all you need to understand the alphabets first we uh study what abcd and then words then we frame sentences by using grammars and all right and then we communicate. C language was developed by **Dennis Ritchie in 1972** and was developed in 1972. Program is dependent on that machine to machine so It 's not easy to write programs in machine language because it's not portable in one machine if you write program for edition then again you have to write rewrite that program for second machine. Assembly level languages come assembly level languages and after that languages come to overcome limitations to add portability concept.

Own program right that is why we need to write programs and that is why we need to use programming languages like c and c++ and also we need to use uh programming tools like debugger and editor and also we need to use uh programming libraries like **STDIO** and **STDIB** and also we need to use uh programming tools to uh convert our code into uh zero or uh machine code right so that is what we are going to discuss computer is nothing without programs right so we need to write programs to communicate with computer because see and this is what this is according to you know those uh cpu architecture some set of specifications are there which some architecture is there which cpu follows uh I think you will you or maybe you have studied the subject co a computer organization and architecture in that you must have studied those architectures right so according to those specification those arc architecture of the cpu this code will differ. Bell Laboratories, the headquarter of these Bell Labs are where he developed it.

C is a system programming languages language many software have been written in c language oracle android. During 1980s c was the most widely used programming language and in **1989** it was standardized by **ANSI** that is why it is called a **NSIC** and see how the computer is going to understand what whatever we will write in c.

Features of C Language | Use of C Language | C Programming

I have discussed introduction to programming like What is need of programming? Why do you write programs and some basic points about C language. C is a structured language and it supports use of use of pointers, so you can directly access the memory. You can interact with the memory. C is extensible language you can extend this means what does that mean you can add your own function to C libraries. C library. it supports modular programming or rather than writing a complete program as a whole story. C is used to develop and operate embedded systems that is also known as system programming language. it is case sensitive language. It. reads lowercase letters and uppercase letters differently. C is platform dependent like when you are writing a program. In Windows. You compile that program and object file has been created fine so you can't run that file on Mac and Linux.

Structure of a C Program | Programming in C

I have already discussed some basics like what is C introduction to programming? C is having a many built in functions, many predefined functions and we use those functions that I have already discussed when we 're discussing the features of C language that C is having. many built-in functions. header file is for what standard input output means for which function for print f and scan f sprint f is what to take input. compiler will not be able to understand if you will not include this file but to tell the compiler the meaning of this thing. The code of this function is already defined in this header file studio Dot H it's already defined you don't have to write down the code in your program for print f function. You can directly use this function.

In a program, we use two types of variables and functions. One is local and one is global... Local variables can be used within a within a function only where you define those variables. global variables can also be used in every function of a program in main also and in every user defined functions. the variables that are used in more than one functions in a program. Those are global variables and you can declare those variables globally outside of those functions as well as here you will declare what all the user defined functions will declare here. in a program there can be only one main function. This question can also be asked many times by how many main function can be there. a program is just to print something it's not addition of two numbers. a program should follow this structure if you are including every part. Like you have user defined functions also Global declaration. a simple program in main. I have only executable part. There is no declaration part that is fine and after that that's it sub-program section.

This is what structure of a C program in next video. We are going to discuss compilation process how the program is to be converted into object code and then executable code right. After this main we have sub-program section I have only one user defined function that is display word display. in definition, we are just printing print f. so whenever this program is going to be executed, control will go to main function.

Execution Process of a C Program | C Programming

re the series of leadership programming in Silico Da Store built busy cushion process offensive Jews in private your own discus steps innovation program with now we will see layman so there is a process or if i.e. problem with who love you west coast? The is the models or I see shower place flash a link that becomes and loading so is so buzzword has become bad slew is by things in my I chance least become lestips win gras passion is to be done by linking in my loading and then finally you dat because and blew tip that have a Buddhist actually want on for this floor char my discus de steps in war and execution processor Fancy problem. the core gets wider in assembly language into object code for studo vision on force sill na object Van Gijs points comment. give your blood no but i have to now Molly's hair Munich wins in pre processor replaces on the lions Start in this house. How to put the cover on the functions there. the and Jane was not how popular source for you how to lose a factions. I call you there can hear to my sister manual. I you al book. This is the Professor Higgins so gram and I find my finger eq. during this process for just dance is dead simple.

Constants in C | Types of Constants | Programming in C

In c you can say numeric constants and character constants or somewhere. It is also written four types of constant, integer, constant, floating point constant and character constant and string constant. We have 3 types decimal constant, octal constant and hexadecimal constraint right. if I write 0x that is also exactly decimal constant if I write like 0 x. and 7 f. This is also hexadecimal constant. real constants are also known as floating point constants. these are having fractional part like. If you uh write 12. 56. This is decimal part. if you write this is invalid. There can not be two decimal points right.

Character constraints are also two types, single character and string constant. These character constraints are within computer it. These are being stored in the

form of sky codes. if you write 1 and see 5 is not equal to this 5. This is character constant. It is having some different value. This is numeric constant. are writing like this printf%d. This is for integer format specifier and a it is what single quote mark. So this is what character constant so it will print what integer value of this a. If you write percentage C, it is the character constant. It is used to print characters. if i write a in double quote. This is not it is single character, but enclosed in double quotation mark. So it is a string constant. we use what keyword const keyword to declare constant like this right one. method is this one so if you write in a program suppose I am writing a function word main I am not writing a complete program. You can include those header files. you can use hash define macro definition symbolic constant so there you can write this would be above this main function.

A semicolon after the statement this would be wrong? So these rules you have to take care. So this is you can say types of constant and how you declare constant in your C program, so you can also write down this thing on your idea or you can run this program and you can check this is giving an error or not.

Keywords and Identifiers | Programming in C

We will see what are keywords and what are identifiers in C. we have 32 keywords in a and s I C. There are 32 keywords. Right now. every keyword is having their own meaning and keywords can’t be used as identifiers right so they are having fixed meanings and their meaning can't be changed during the program. You can’t change their meaning fine and keywords as you can see here. All the keywords are in small letters. C is what case sensitive here. you have to tell me in comment box this is allowed or not right next is what keywords can’t be used as identifiers. We can we can’t use like int and here. I 'M using float, you can use int a is name of variable that is fine. This is fine. the first letter of an identifier is always beer. You can say this alphabet or underscore is also allowed in some compilers.