

C Programming

Course Note's

Why Learn C Programming Language?

So guys, welcome to the first Tutorial of C Programming Playlist. In this tutorial we are going to discuss the benefits of C programming and why should you choose to learn it, while giving you an insight in the language.

I am not going to go over the technical terms that aren't going to help you in any way, like its release date or about the inventor, but I am going to provide you the knowledge that will help you make your mind, whether you should learn C programming or not.

What is C

C is one of the fastest programming language as it is close to low-level languages such as Assembly language. If you are already familiar with programming, then you must know the demand out there for a C programmer. Because C comes in handy in case of all the applications that require fast processing, such as games, or major parts of different operating systems.

Benefits of C:

C was developed in early **1970's** but it is still in much demand and it doesn't seem it is going anywhere, there are a lot of reasons for that such as:

- C takes only significant CPU time for interpretation. That is why a lot Python libraries such as **NumPy**, **pandas**, **scikit-learn**, etc. are built using C.
- Being close to Machine language, some of its functions including direct access to machine level hardware APIs
- It is a highly portable language
- Data structure and algorithm can be better implemented in C language, as you can see in my <u>Data Structures and Algorithms</u>
 <u>Course Playlist</u>.
- C is being used to support other programming languages to enhance their efficiency.

Scope:

Let's talk about the scope of C, so you may know that you are not wasting for time with this Playlist. C has a wide range of scope

- Windows, Linux, Mac all are mostly written in C. Linux is written 97% using C.
- C has also been used widely while creating iOS and Android kernels.
- MySQL database is written using C.
- · Ruby and Pearl are mostly written using C.
- Most part of Apache and NGINX is written using C.
- · Embedded Systems are created using C

Control:

C gives most of the control in the hand of users. Things like memory allocation and manipulation are totally in the hands of the programmer. Being a flexible language, it provides more access to the programmer because of which it is more efficient.

All of these reasons make C one of the widely used Programming language having special respect in the heart of programmers.

Summary:

C is not a hard language to learn and along with that it stills has a scope in the future. It is a low-level programming language that makes it more efficient and swifter. So many devices and applications are build completely or partially using C, so there is a wide

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range of options related to field you want to get into.

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