* What is C++
* C++ was developed by Bjarne Stroustrup, as an extension to the [C language](https://www.w3schools.com/c/index.php).
* C++ gives programmers a high level of control over system resources and memory.
* C++ is a cross-platform language that can be used to create high-performance applications.
* Why use C++
* C++ is an object-oriented programming language which gives a clear structure to programs and allows code to be reused, lowering development costs.
* As C++ is close to [C#](https://www.w3schools.com/cs/index.php) and [Java](https://www.w3schools.com/java/default.asp), it makes it easy for programmers to switch to C++ or vice versa.
* Difference between C & C++
* The main difference between C and C++ is that C++ support classes and objects, while C does not.
* C++ was developed as an extension of [C](https://www.w3schools.com/c/index.php), and both languages have almost the same syntax.
* Declare variable
* Type Variable\_name = value;
* Meaning

<< - Insertion operator use in cout

>> - Extraction operator use in cin

Cin - to get user input

Cout – to output values

* What is OOP

OOP stands for Object-Oriented Programming.

Procedural programming is about writing procedures or functions that perform operations on the data, while object-oriented programming is about creating objects that contain both data and functions.

Object-oriented programming has several advantages over procedural programming:

* OOP is faster and easier to execute
* OOP provides a clear structure for the programs
* OOP helps to keep the C++ code DRY "Don't Repeat Yourself", and makes the code easier to maintain, modify and debug
* OOP makes it possible to create full reusable applications with less code and shorter development time

There are five types of inheritance in C++:

* Single Inheritance
* Multiple Inheritance
* Multilevel Inheritance
* Hybrid Inheritance
* Hierarchical Inheritance

1. Single Inheritance in C++:

When the derived class inherits only one base class then it is known as Single Inheritance.