What is Data Types in C Language?

In [C language](#), Whenever we create a variable to store any data or information, then while declaring that variable, we also need to declare which type of data that variable is going to store.

These data types can be int, char, float, double, and by looking at these data types, it is known which type of value is going to be stored in the variable.

We store Integer value in variables, created with int data type, and in variables created with char data type we store character type of data, and in variables created by float data type we store floating point values.

When declaring a variable, we declare its type because when the compiler converts our source code into machine code then the compiler will allocate some memory in ram for that variable according to that data type.

So we declare the data type of variable to tell the compiler, which type of data is going to be stored in that variable. so that the compiler allocates memory in ram for that variable correctly according to data types.

When declaring a variable, its type is also declared. so that the compiler allocates as much memory to the variable as it needs. If we don't do this then memory loss may be more.

In easy words, Data Types tells what kind of data we are going to store in a variable.

In this example, we have done a variable declaration by doing **int x**, in which **int** is a **data type** and x is the name of **variable**.

By looking int data type, it is clear to know that we will store an integer type value in the variable x.

There may be a need to store many types of data in a program. According to the kind of data we have to store, we can use many types of data types in C language.

Now let's learn how many types of data types in C language.

Types of Data Types in C Language

There are mainly three types of data types in C language -:

1. Pre-defined data types
2. Derived data types
3. User-defined data type

1. Pre-defined Data Types

Such data types are called Pre-defined Data Types which are already defined and don't need to be defined separately, such as int, char, float, double, void, etc. These data types come in Basic Data Types.

These data types, don't mean to tell the compiler separately because they are already defined. And the data types that are also keywords is called primitive data types.