

## Basic of C++

### 1. Data Type

- All variable use data-type during declaration to restrict the type of data to be store.
- Every data type require a different amount of memory.
- In C++, data types are declarations for variables. This determines the type and size of data associated with variables.

```
Int age = 13;
```

#### I. Primitive Data Type (Pre-defined or build-in data type):

Data Type	Meaning	Size (Bytes)
Int	Integer	2 or 4
float	Floating-point	4
double	Double Floating-point	8
char	Character	1
wchar_t	Wide Character	2 or 4
void	Void	0
bool	Boolean	1

II. Derived data type: The data type that are derived from the primitive or built-in datatypes are referred as Derived data type.

- Function
- Array
- Pointer
- Reference

III. Abstract or User-Defined: These data type defined by the User itself.

- Class
- Structure
- Union
- Enumeration
- Typedef

Data type modifiers available in C++ are:  
It modified Size and Range of build-in data type.

- Signed
- Unsigned
- Short
- Long

For More Details: <https://www.geeksforgeeks.org/c-data-types/?ref=lbp>