

C++

# Why Learn C++

Some of the Great Projects Made in C++ are :-

→ DevOps Cycle

☐ Adobe Photoshop & Illustrator

☐ Spotify

☐ YouTube

✓ ☐ Windows OS

☐ Node.js

✓ ☐ Microsoft Office

# Structure of a C++ Program

```
#include <iostream>
using namespace std;
int main()
{
    return 0;
}
```

Diagram annotations:

- Arrows point from `<iostream>` to header file and math.h.
- An arrow points from `std` in `using namespace std;` to `0` in `return 0;`.

extension name of  
• .cpp

✓ filename.cpp

° input output stream

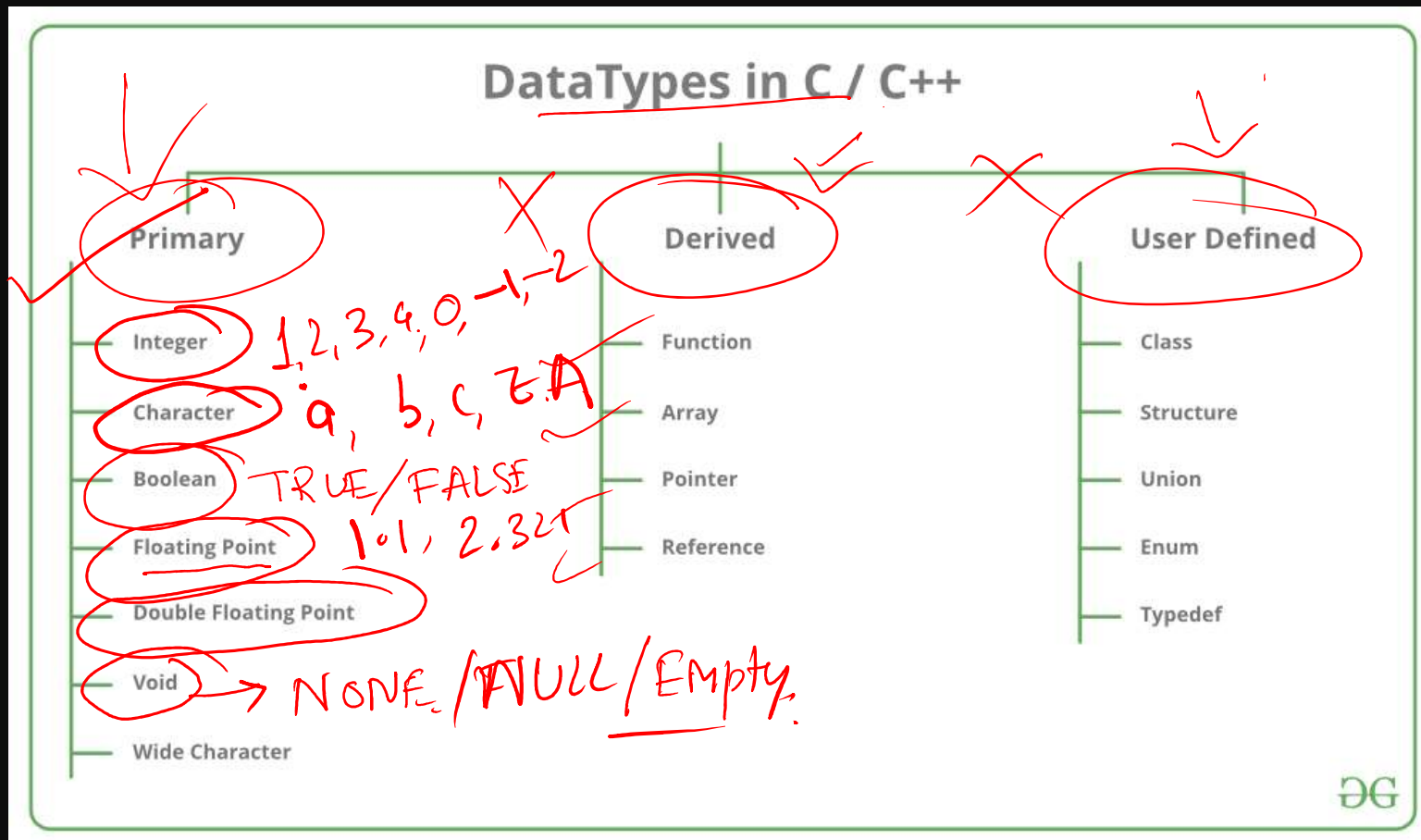
° main

° int

# What are Keywords?

**Keywords** (also known as **reserved words**) have special meaning to the C++ compiler and are always written or typed in short(lower) cases. Keywords are words that the language uses for a special purpose

# Learning About Data-Types and Variables



## Variables.

↳ input

↳ Output

↳ processing

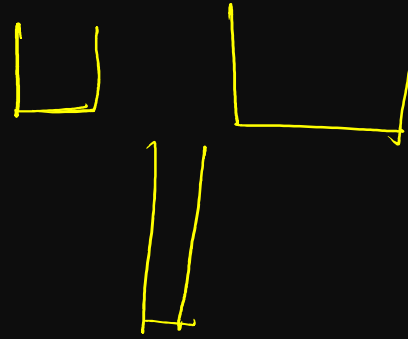
↳ Update

① → Output

② input

③ Process

④ Update



integer, float, double, character

# Writing Hello World Program

```
#include <iostream>

using namespace std;

int main()
{
    cout << "Hello World!";

    return 0;
}
```

# Comments

## Single Line Comments

```
// I'm a Single Line Comment
```

## Multi-Line Comments

```
/*  
This  
is  
a  
Multi-Line  
Comment  
*/
```



# Escape Sequences

Escape sequence	Description
<code>\'</code>	<b>single quote</b>
<code>\"</code>	<b>double quote</b>
<code>\?</code>	<b>question mark</b>
<code>\\</code>	<b>backslash</b>
<code>\b</code>	<b>backspace</b>
<code>\n</code>	<b>line feed - new line</b>
<code>\r</code>	<b>carriage return</b>
<code>\t</code>	<b>horizontal tab</b>

# Operators

- 1.Arithmetic Operators
- 2.Assignment Operators
- 3.Relational Operators
- 4.Logical Operators
- 5.Bitwise Operators
- 6.Other Operators

# Arithmetic Operators

Operator	Operation
+	Addition
-	Subtraction
*	Multiplication
/	Division
%	Modulo Operation (Remainder after division)

