Lesson 3 CPP cin

The "c" in **C++** cin refers to "character" and "in" means "input". Thus, **cin** means "character input". The C++ **cin** object belongs to the **istream** class. It accepts input from a standard input device, such as a keyboard.

cin in **C++** is similar to **scanf** in **C** language.

For reading inputs, the extraction operator(**>>**) is combined with the object **cin**. The data is extracted from the object cin, which is entered using the keyboard by the extraction operator.

Example :

```
#include <iostream>
using namespace std;
int main() {
  int num;
  cout << "Enter a number: ";
  // take integer input
  cin >> num;
  cout << "You entered: " << num;

  return 0;
}
```

Output:

Enter a number: 25

You entered: 25

What happens if the user enters a float while the variable is defined as an int ? it will be considered as an integer!

Last Example :

Output:

Enter a number: **5.98972**

You entered: **5**

If we want to enter a character :

```
#include <iostream>
using namespace std;
int main() {
  char x;
  cout << "Enter a character: ";
  // take integer input
  cin >> x;
  cout << "You entered: " << x;

  return 0;
}
```

Output:

Enter a number: e

You entered: e

cin in **CPP** automatically records the value of the variable according to the **type** of the variable stored in memory without the need for%d if it is an integer, %d if it is a decimal number, or%c if it's a character.

If we want to enter a bool: (true - false) :

```
#include <iostream>
using namespace std;
int main() {
bool x;
cout << "Please, Enter a num: ";
cin >> x;
cout << "The num is " << x<<endl;
}
```

input :

5

output :

1

Any number **different** from zero is considered **1** in **bool.**