

# Helper Classes

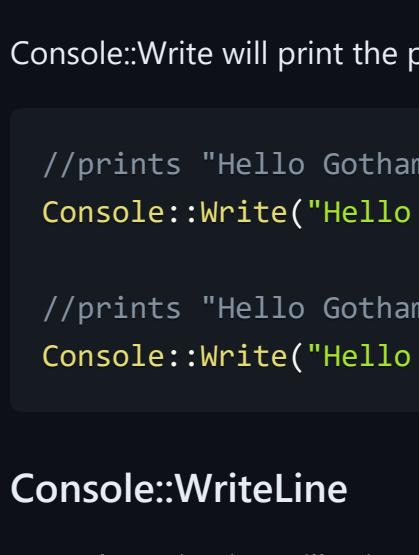
There are 2 helper classes that are provided for the labs: **Input** and **Console**. You'll find the files under the **Misc/Input** and **Misc/Console** folders in the Solution Explorer.

## ◆ Console Class

The Console class is provided in the labs to make it easier to **print things to the Console window**. You'll find the class in the labs in the **Misc/Console** folders in Solution Explorer. Investigate the **Console.h** file to discover the methods available and how to call them.

### File Location

You can find the Console class declared and defined in the **Console.cpp** and **Console.h** files. They can be located under the **Misc/Console** folder in the Solution Explorer.



### Console::Write

Console::Write will print the parameter at the current cursor location in the console.

```
//prints "Hello Gotham."
Console::Write("Hello Gotham.");

//prints "Hello Gotham." with a foreground color of Yellow and a background color of Cyan.
Console::Write("Hello Gotham.", ConsoleColor::Yellow, ConsoleColor::Cyan);
```

### Console::WriteLine

Console::WriteLine will print the parameter at the current cursor location in the console and then move the cursor to the beginning of the next line.

```
//prints "Hello Gotham." and moves the cursor to the next line
Console::WriteLine("Hello Gotham.");

//prints "Hello Gotham." with a foreground color of Yellow and a background color of Cyan.
//Then it moves the cursor to the next line.
Console::WriteLine("Hello Gotham.", ConsoleColor::Yellow, ConsoleColor::Cyan);
```

### Console::SetCursorPosition

Console::SetCursorPosition moves the cursor horizontally to the position as specified by the argument to the method.

```
//moves the cursor to the 15th column (the horizontal x position) in the console
Console::SetCursorPosition(15);
```

### Console::GetWindowWidth

Console::GetWindowWidth returns the horizontal size of the console window.

```
int width = Console::GetWindowWidth();
```

### Console::GetWindowHeight

Console::GetWindowHeight returns the vertical size of the console window.

```
int height = Console::GetWindowHeight();
```

### Console::Reset

Console::Reset sets the foreground and background colors back to the default values for the console.

```
Console::Reset();
```

## ◆ Input Class

The Input class is provided in the labs to make it easier to **get input from the user**. You'll find the class in the labs in the **Misc/Input** folders in Solution Explorer. Investigate the **Input.h** file to discover the methods available and how to call them.

There are 4 methods: **GetString**, **GetInteger**, **GetMenuSelection**, and **PressEnter**. These methods are static therefore to call them you use the **Input** class name with the **::** scope resolution operator.

### File Location

You can find the Input class declared and defined in the **Input.cpp** and **Input.h** files. They can be located under the **Misc/Input** folder in the Solution Explorer.



### Input::GetString

Will print a message then return the string that the user enters.

```
//prints "What is your name?" and returns the user-entered string
std::string myName = Input::GetString("What is your name?");
```

### Input::GetInteger

Will print a message then return the integer that the user enters.

NOTE: pass 2 integers for the min and max range for the integer. GetInteger will not return until a number is entered that is within that range.

```
//prints "What is your age?"
//returns the int when the user-entered number is between 0 and 120 (inclusive)
int age = Input::GetInteger("What is your age?", 0, 120);
```