

# (Monty) Python More Conditional Statements

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# Comparison

	Java	C++	Python
source code name	.java	.cpp	.py
Object Oriented?	required	optional	optional
output	<code>new Text(" ", , , )</code> <code>System.out.print()</code>	<code>cout &lt;&lt;</code>	<code>print(" blah, blah")</code>
functions/ methods	methods ( <code>bob.hide()</code> )	functions ( <code>gotoxy(4,3)</code> )	functions ( <code>str(5)</code> )
input	skipped this (complicated)	<code>cin&gt;&gt;</code>	<code>input( )</code>
casting <code>int( )</code>	<code>int(double)</code>	<code>int(double)</code>	<code>int(string)</code>
if - else	<code>if(boolean)</code> { } <code>else</code> { }	<code>if(boolean)</code> { } <code>else</code> { }	brackets replaced by indenting!

# More on if statements...

- **Booleans** can be the same as in C++ and Java
  - For example, `if(x > 5)`
- **Booleans** can also be just numbers
  - `if(5)`, 5 evaluates to true
  - `if(-5)`, -5 evaluates to true
  - `if(0)`, 0 evaluates to false

# 1812 Lab Revisited

```
year = input("what year was the war of 1812?")
if(year == "1812"):
    print("u r correct")
elif(year == "1813"):
    print("u r one 2 many")
elif(year == "1811"):
    print("one short")
else:
    print("not close, sorry")
```

Note: only one block of code gets executed with this structure

Note: always put an else with this structure to guarantee one and only block of code gets executed in the if statement

# Lab 7

Write a calculator app that allows the user to do integer addition, subtraction, multiplication and division. (Note this is a repeat of a C++ lab). Make sure you write the problem back out to the screen.

Example output:

Please enter a number: 3

Please enter an operation: -

Please enter another number: 4

$$3 - 4 = - 1$$