# Basics of C++

Jack Garner

August 23, 2020

```
C++
   #include <iostream>
   using namespace std;
2
3
   int main(int argc, char *argv[]) {
     cout << "Hello World" << endl;</pre>
     return 0;
   Java:
   class HelloWorld {
     public static void main(String args[])
3
       System.out.println("Hello World");
```

Differences?

#### Differences?

- 1. include vs import
- 2. Java requires class
- 3. cout vs println

 ${\sf Similarities?}$ 

#### Similarities?

- 1. Main is called main
- 2. Strings and other literals the same
- 3. Curly braces and semicolons
- 4. Arguments to main

```
C++
         string line = "";
         getline(cin, line);
         // Or
3
         cin >> line;
4
   Java:
   BufferedReader reader =
                 new BufferedReader(new InputStreamReader(System.in));
2
   String name = reader.readLine();
3
```

Types

### Types

- 1. Java: int/Integer; C++: int
- 2. Java: String; C++: string (included for string)
- 3. Java: boolean/Boolean; C++: bool
- 4. Java: double/Double; C++: double

Try it: Create a number adder

Try it: Create a number adder

- 1. Get two numbers from stdin then print their sum
- 2. Try added a special message which prints if the numbers add to 1979

### **Documentation**

Useful Documentation:

https://en.cppreference.com