Tutorial 2: Intro to C++

Review: C++ Intro

What are the differences between C++ and C?

What are the differences between C++ and Java?

How can object oriented programming be used in C++?

How can generic programming be used in C++?

Programming Concepts: Streams

Look at hello_world.cpp and input.cpp from the Week1 examples folder as a reference.

What is iostream?

What is a stream?

What is std?

What is boost?

What is cout/cerr and how can it be used to output different data types?

What is cin and how can it be used to input data?

How can data be read from/written to files using streams?

Compilation: C++14

How do we compile a C++ program to use C++14?

Errors: Warnings

What is a compiler warning and how do we check for them?

What are some common examples of compiler warnings that will crash your program?

Debugging: None this week

Exercises:

Write a program to represent a linked list of ints in C++. What are the classes you need? How will they be different to the choices you would make in C?