



Library Overview

CSE 232 – Dr. Josh Nahum

Reading:

Chapter 9

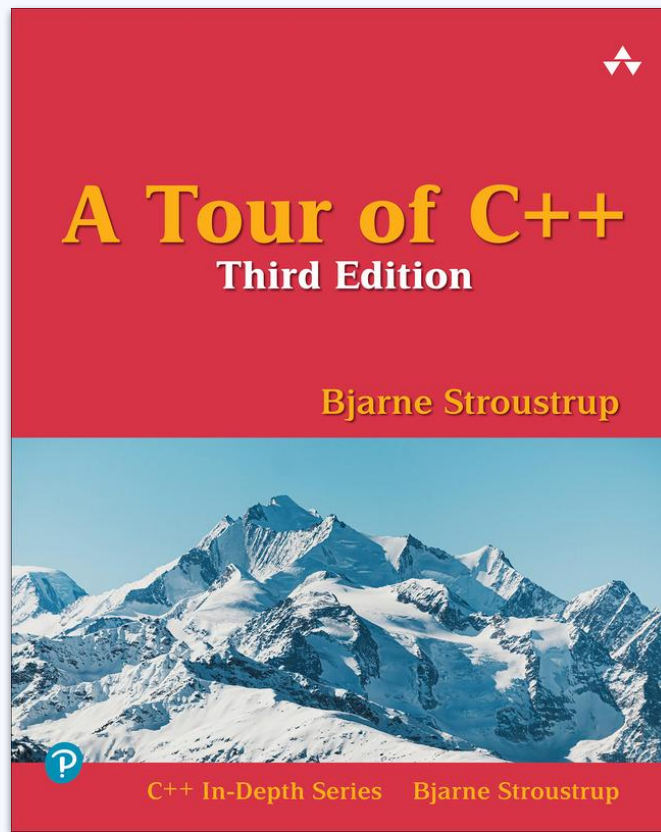




Table of contents

00

`using namespace std;`

01

Ranges

02

C Standard Library





00

using namespace std;

Why avoid "using namespace std;" declarations?



Namespace Pollution

By bringing all of `std::` into the global namespace, it makes it much easier to accidentally name clash with `std`.



Upkeep

If you need to add a function that shares a name with something in `std`, you'll have to refactor your entire project.



Readability

Especially when working with multiple namespaces, it quickly becomes difficult to determine which name is from which library.



01

Ranges



New in C++20



Algorithms

Algorithms (taught in the next few weeks) generally take two iterators to work. All algorithms can use ranges that allow passing of a container directly.



Iceberg

Ranges are a new and powerful feature in C++, but we won't be going into detail here in CSE 232.

The background features a light blue gradient with abstract circuit-like patterns. In the top-left, there are orange and purple lines forming a circuit. In the top-right, a grid of small blue dots is visible. On the right side, there are more circuit lines in blue, purple, and orange, some ending in small circles. In the bottom-left, there are more blue dots and some purple geometric shapes.

02

C Standard Library

Useful C Std Libraries



<stdint>

Specific fixed-width integers



<float>

Useful floating point constants



<ctype>

Char-related functions



<assert>

The assert "function"



<math>

Trig and other math-related functions and constants



<stdio>

C-style IO (notably the printf function)

Attribution

Please ask questions via Piazza

Dr. Joshua Nahum

www.nahum.us

EB 3504



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