Tute 11: Templates

Review: Templates

What is a template?

What is the difference between a class template and a function template?

When is the typename keyword used?

When is the template keyword used?

Programming Concepts: More Templates

How can templates be specialised?

How do we use both class and function templates in the same class?

How is template metaprogramming used?

Compilation: Libraries

What is a library?

How can we create/use a library?

Errors: None this week

Debugging: None this week

Exercises:

Write a program to calculate the nth fibonacci number at compile time.

Provide templated functions to return a reference to an object of type T, accounting for data that is passed in as a pointer, and data that isn't.