Tute 7: Memory Management

Maze Generation

What is wilson's algorithm for the generation of a maze?

Review: Constructors

What is a copy constructor?

What is the difference between a deep copy constructor and a shallow copy constructor?

What is the difference between a copy constructor and a move constructor?

What is a conversion constructor?

What does the explicit keyword mean?

Programming Concepts: Memory Management

What is an assignment operator?

What are the different types of safe pointers available?

What is constexpr?

Compilation: Object Files

What is an object file?

What is a linker?

Errors: Linker

What is a linker error?

What causes a linker error and how do you fix it?

Debugging: None this week.

Exercises:

Look at memory.cpp from the week 6 examples folder as a reference.

What output will the following code produce and why?

What would happen if a copy constructor was defined for class A?

What would happen if an assignment operator was defined for class A?

What would happen if a was declared and used as a pointer instead?