## **Tute 6: Memory Management**

**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?