Pointers and Memory Exercises

Pointers

- Write a simple program that creates a pointer
- Use a stack variable to set the pointer's value
- Print out the value of the pointer
- Print out the value of the stack variable by dereferencing the pointer

Pointers and Heap Memory

- Explain how to obtain allocated memory from the heap
- Why are pointers needed for this kind of memory?
- What important thing must you do with this memory when you have finished using it? Why is it important?

Array Allocation

- Explain how to obtain allocated memory from the heap which can be used for an array
- Write a simple program which allocates memory from the heap for an array. Populate the array and print out the values of its elements
- What important thing must you do with this memory when you have finished using it? Why is it important?