**Homework 5 Documentation**

This project was very simple, I provided my test files of the output of the vector for each part of the question (1-4). I will provide my documents of my testing, but once you run and test it yourself, my text documents of the outputs of each part will be overwritten.

*1\_HeapVec* is the first creation of the heap of a vector.

*2\_MeanVec* is simply the mean pushed to the back of the heap.

*3\_PoppedVec* is the max value popped off the heap.

*4\_ResortedHeap* is the resorting of the heap after all operations above are done.

The usage of the STL library proved to me extremely helpful and simple. If you’re implementation is in no need of changes or specific functions, the usage of the STL is extremely beneficial. The random number generated was recycled from previous projects, changing it only for the numbers to be written inside the vector instead of an output text file.