**CSCI 2270 Interview Notes**

* Equations for BH: left, right, parent
* Which is faster and why?
* Binary Heaps - only half needs to be searched
  + Memory reallocated
* Priority Queue
  + Space is preallocated? They function as vectors
* Memory Allocation is a big cost, particularly dynamic memory allocation
* Binary Heap & Children
* Which was fastest and why?
* Improve Binary Heap implementation - make it more like STL; fix dynamic memory allocation
* STL seems to use a binary heap implementation, because mine is close and could be improved;
* LL cannot be improved because of its worst-case complexity; the dynamic memory allocation
* Mention: Worst-Case Complexity, Dynamic Memory Costs,
* Sorting is always done, but because the linked list needs to be sorted in its entirety, its worst-case is far worse than the binary heap, which only requires half of the time.
* Static Inline: used for code outside of a class in header files; means, "if you see this once, use it,"
* Inline = if you see this function again, ignore it