**CS 10C – HW 2**

1. An array-based implementation of the list is more efficient for binary search because if it was a linked list, all the data would first have to be sorted. Even if it was sorted, binary search works by searching halves of data at a time, cutting it out when the item isn’t found. This works better in an array, because the array is sorted in order, allowing for chunks of list items to be selected, searched, and cut out if the item isn’t found. A linear search would work better for a linked list.
2. Exercise 2
3. The computer numbers are given my knowledge of asymptotic complexity of each sorting algorithm.