# Writing exercise.

1. For bubble sort: the worst case big-Oh complexity should be n2, as they used two nested loops to finish the sort. For the best case it would be n, for nearly sorted list, specially that lists that only need one loop to sort.
2. For selection sort, the worst case big-Oh complexity should be n2 as well as it would also go through two nested loops. The best case is n as when nearly sorted. I did not allocate any memory except swapping the numbers. At that process, I setup a int buffer.
3. Using linked-list actually makes the complexity more worse as it cannot directly go to the a certain node.
4. The built-in sorting function in C is actually a quick sort method and it is polymorphism for different data type. Quick sort is firstly find a pivot of a list of numbers and then classify the other numbers to the left or right, and then the two sub-list also use the same method until all numbers are in order.