# Task 1

# Analyzing the Stable Selection Sort

$$(n-1)+(n-2)+\ldots+2+1=n(n-1)/2\in heta(n^2)$$

#### Instructions

```
compile:
gcc -o ss stable_selection_sort.c

run with data from file numbers0.txt:
./ss < numbers0.txt

run with data from file numbers1.txt:
./ss < numbers1.txt

run with user input:
./ss</pre>
```

# Task 2

### Instructions

```
compile:
gcc -o textidx text_indexing.c

run with data from file data0.txt:
    ./textidx < data0.txt

run with data from file data1.txt:
    ./textidx < data1.txt

run with data from file data2.txt:
    ./textidx < data2.txt

run with user input:
    ./textidx</pre>
```

### **Additional Notes**

You can change a macro flag in my code to compile it slightly differently. I had a different version of my code where punctuation was trimmed prior to the sorting, and the code was slightly more optimal. However, changing this flag could lead to some values being sorted out of order.