Task 1

Analyzing the Stable Selection Sort

$(n - 1) + (n - 2) + ... + 2 + 1 = n(n - 1)/2 \in \theta(n^2)$

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
```

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
```

Additional Notes

You can change how the program compiles with an extra flag. Compiling with the following flags will make the program remove punctuation prior to sorting it, giving it slightly different behavior.

```
gcc -o textidx text_indexing.c -D REMOVE_PUNCTUATION=1
```