

## Exercise 1

Write a command line program in C language with this syntax:

```
sort_int <filein.txt> <fileout.txt>
```

The first parameter is the name of a text file that contains text format base 10 numbers representable as 32 bits signed integers, separated by whitespace. The program must create a new file, with the name passed as the second parameter, with the same numbers sorted from the smallest to the largest, each followed by <new line>.

For example, given the following input file,

```
120␣  
35 -98␣  
100000␣  
87␣  
236 85
```

the program would output a new file containing:

```
-98␣  
35␣  
85␣  
87␣  
120␣  
236␣  
100000␣
```

If the input file contains incorrect data, the program limits itself to the data it has managed to read so far, and ignores the rest. For example, given the following input file,

```
120␣  
35 -98x␣  
87␣  
236 85
```

the program would output a new file containing:

```
-98␣  
35␣  
120␣
```

because after reading the -98, the x would block the input.

If the output file exists, it will be overwritten. The program returns 0 if the command line parameters are correct, and if it can read the input file and write the output file, otherwise it returns 1.