Problem 4 - File Chunk Swapper

Write a C program that reads a file in chunks of **4096 bytes**, **swaps** the first and second half and writes the result block to an output file.

For example, given **src.txt** which contains the string "**AAAAAAAAAAAABBBBBBBBBBBB**", we start reading the file contents. On the very first read of 4096 bytes, we get the whole string. We locate the mid:

```
AAAAAAAAAAAA | BBBBBBBBBBBB
```

We then swap the two parts, resulting in:

```
BBBBBBBBBBBBAAAAAAAAAAAA
```

Finally, we write the result into the output file and continue with the next chunk from the source file (in this case, there are no more chunks to swap).

Input

The input will be read from the terminal. The input parameters will be the **source file name** and **output file name**. They will be space separated. See the examples given below.

Output

The resulting swapped chunks should be written to the passed output file.
- In case of success, print "**Success!**" at the end of the program
- In case of invalid input, print "**Usage: <src-file> <dest-file>**"
- In case of invalid file names, print "**{file-name}: No such file or directory**"

See the examples given below.

Constraints

- The program should display **no memory leaks**, **buffer overflows** or **dangling pointer anomalies**.

Examples

Input from Terminal	Output	
./program src.txt dest.txt	Success!	
	src.txt	**dest.txt**
	AAAAAAAAAAAABBBBBBBBBBBB	BBBBBBBBBBBBAAAAAAAAAAAA

Input from Terminal	Output	
./program src.txt dest.txt	Success!	
	src.txt	**dest.txt**

	batka	tkaba

Input from Terminal	Output	
./program src.txt	Usage: <src-file> <dest-file>	
	src.txt	**???**
	baceto	

Input from Terminal	Output	
./program	Usage: <src-file> <dest-file>	
	???	**???**

Input from Terminal	Output	
./program src.txt dest.txt	src.txt: No such file or directory	
(src.txt or dest.txt do not exist)	**???**	**???**