Lab: Streams, Files and Directories

I.   File Operations

1. Odd Lines

Write a program that reads a text file and writes it's every **odd** line in another file. Line numbers starts from 0.

Examples

Input.txt	Output.txt
Two households, both alike in dignity, In fair Verona, where we lay our scene, From ancient grudge break to new mutiny, Where civil blood makes civil hands unclean. From forth the fatal loins of these two foes A pair of star-cross'd lovers take their life; Whose misadventured piteous overthrows Do with their death bury their parents' strife.	In fair Verona, where we lay our scene, Where civil blood makes civil hands unclean. A pair of star-cross'd lovers take their life; Do with their death bury their parents' strife

2. Line Numbers

Write a program that reads a text file and inserts line numbers in front of each of its lines. The result should be written to another text file.

Examples

Input.txt	Output.txt
Two households, both alike in dignity, In fair Verona, where we lay our scene, From ancient grudge break to new mutiny, Where civil blood makes civil hands unclean. From forth the fatal loins of these two foes A pair of star-cross'd lovers take their life; Whose misadventured piteous overthrows Do with their death bury their parents' strife.	1. Two households, both alike in dignity, 2. In fair Verona, where we lay our scene, 3. From ancient grudge break to new mutiny, 4. Where civil blood makes civil hands unclean. 5. From forth the fatal loins of these two foes 6. A pair of star-cross'd lovers take their life; 7. Whose misadventured piteous overthrows 8. Do with their death bury their parents' strife.

3. Word Count

Write a program that reads a list of words from the file **words.txt** and finds how many times each of the words is contained in another file **text.txt**. Matching should be **case-insensitive**.
The result should be written to another text file. Sort the words by frequency in descending order.

Examples

words.txt	Input.txt	Output.txt
quick is fault	-I was quick to judge him, but it wasn't his fault. -Is this some kind of joke?! Is it? -Quick, hide here…It is safer.	is - 3 quick - 2 fault - 1

4. Merge Files

Write a program that reads the contents of two text files and merges them together into a third one.

Examples

Input1.txt	Input2.txt	Output.txt
1 3 5	2 4 6	1 2 3 4 5 6

5. Slice a File

Write a program that slice text file in 4 equal parts.
Name them:
- Part-1.txt, Part-2.txt, Part-3. txt, Part-4.txt

II. Directory Operations

6. Folder Size

You are given a folder named "TestFolder". Get the size of all files in the folder, which are **NOT directories.** The result should be written to another text file in **Megabytes**.

Examples

Output.txt
5.16173839569092