Tutorial Problem Set #1

Due: Wednesday, September 18, 2024, 11:59 PM

Policy

- Piazza questions on tutorial problems will be ignored or deleted. Questions will only be answered in your assigned tutorial section.
- Sample executables can be found in your git repository directory (run `git pull`).
- Completing the problem set will reduce the weight of the final exam by 0.5%. To complete a problem set, you must pass at least 50% of the secret tests.
- You may assume all input is valid. Tutorial problems **NEVER** require checking for invalid inputs.
- Use `import` statements, `g++20h` and `g++20` when compiling your program.
- You may only `import` the following libraries: `iostream`, `string`, and `sstream`.

Question 1

In this question, you will continually receive text via standard input until EOF is reached. Upon reaching EOF, your program should print the line from the text that contains the fewest words, followed by the line from the text that contains the most words. You may assume that input will contain at least one line.

In the event of a tie, report the first line in the tie. For example, given the input (which happens to be a haiku):

```
i love 246
it's the best course in the world
pure coding delight
```

The output of the program should be:

```
i love 246
it's the best course in the world
```

Although the lines "i love 246" and "pure coding delight" both contain the fewest number of words (3), we report only the first line.

In the event that all lines have the same number of words, print the first line twice.

A word is considered anything that `operator>>`, when used to read from an input stream into a `std::string`, considers to be a word.

Submission

Submit your solution in a file called `main.cc` to Marmoset.