**Coding challenge**

A Rust program is needed which solves the following processing problem:

A user keys-in a string of text from stdin.

The string must be processed so that the case of individual letters is reversed.

The resulting string must then be output, e.g.

**This is a test of Frank’s function**

becomes

**tHIS IS A TEST OF fRANK’S FUNCTION**

**Design notes**

* Solve using one or more bespoke functions.
* Ensure functions follow SRP (single responsibility principle) in design and implementation.
* Use Rust library methods to assist.
* Non-alphabetic characters are to remain unaffected.

**Extension tasks**

* Modify your solution to remove any non-alphabetic characters from the processed string.
* Track and display how many characters were modified in total.
* Differentiate “modified” count from “deleted” count in the output.