

Learning Outcomes

Upon completing this assignment, students should be able to

- Define an application class in Java that can process command-line arguments.
- Convert String values to **double** values.
- Handle/recover from conversion errors.

TODO: More explicit selection of test cases. Tests work when they *fail*.

Introduction

Write a program, *Adder*, that cycles through its command-line arguments, treating each one as a *floating-point, decimal* number and prints out the number of values added as well as their sum.

Example Interactions

In the following, the dollar sign is the operating system prompt and all response lines from *Adder* are indented past the prompt (not what should happen with the program: begin in the first output column).

```
$ java Adder
  0 values added; sum = 0.00
$ java Adder 71
  1 values added; sum = 71.00
$ java Adder 0.5 -1.0 0.25
  3 values added; sum = -0.25
$ java Adder 1 +9 walnut 5
  "walnut" is not a number.
  3 values added; sum = 15.00
```

Deliverables

You are to provide all Java files to compile the program and a README file in a commonly readable format (Markdown, Org, plain text).

Testing

The program should be thoroughly tested. Your test plan and results should be documented in the README.

Documentation

All source code files are to follow the coding standards of the Computer Science department.

README

Must document:

- design decisions (what choices did you have to make and how did you make them?)
- testing plan (what did you test, how, and what were the results?)
- how the customer can *re-run* your tests
- how to **compile** your program from the command-line
- how to **run** the compiled version of your program from the command-line

This is to be submitted as all programs up to this point have been.