

ITP 435 Assignments

PA1: RLE (Due 9/2 @ 11:59PM)

The GitHub classroom link for this assignment is: <https://classroom.github.com/a/YzwuDRgV>

Run-length encoding is a basic form of compression. In this assignment, we will implement a compression program which can compress files using a modified form of RLE

In the first part, you will write the core compression/decompression code. After that, you will write code to compress/decompress files. You will also write unit tests along the way.

Most of the files you will edit are in PA1 are in the `src` folder: `RleData.cpp`, `RleFile.cpp`, and `SrcMain.cpp`. Additionally, you will edit `tests/StudentTests.cpp`. You don't need to edit or create any other files for PA1 (though if you really want to, you can).

Grading Rubric

Criteria	Points
<i>Graded Tests</i>	
*** Part 1 (12 tests, 2 points per)	24
*** Part 2 (6 tests, 8 points per)	48
*** Part 3 (1 test)	3
Your Test Case Quality/Variety	15
Code Quality (check for any build/clang-tidy warnings)	10
Total	100

Note: We grade only based on your GitHub Actions build and unit test results.

DANGER

If your code does not compile on GitHub Actions, you will get a 0.

Code quality grading for this first assignment is not as strict as later assignments. However, check your GitHub Actions build log for things like warnings and clang-tidy warnings. You should fix these to get full code quality points.

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