Lab 4: Volume

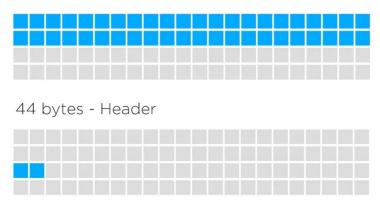
Write a program to modify the volume of an audio file.

\$./volume INPUT.wav OUTPUT.wav 2.0

- INPUT.wav is the name of an original audio file
- OUTPUT.wav is the name of a modified output audio file
- Volume factor (e.g., 2.0 or 0.5)

WAV Files

- One 44-byte header
- Many 2-byte samples



2 bytes each - samples

Types

- uint8_t is a type that stores an 8-bit unsigned (not negative) integer
- int16_t is a type that stores a 16-bit signed (positive or negative) integer
- Header file for above-mentioned types is stdint.h

TODO

- Read the header from the input file
- Write the header to the output file
- Repeat for each sample:
 - Read the sample from the input file
 - Multiply the sample value by the volume factor
 - Write the new sample to the output file