### 1. Basics

- Write a program that can read and write a file from disk using the standard C/C++ library's `open`, `read`, `write`, and `close` functions.

- Add parameter for the file name;

- Add parameter for how big the file should be (for writing);

- Add a parameter to specify how much to read with a single call (block size);

Way to execute: `./run <filename> [-r|-w] <block\_size> <block\_count>`

### 2. Measurement

When measuring things it helps if they run for "reasonable" time. It is hard to measure things that run too fast as you need high-precision clocks and a lot of other things can affect the measurement. It is also annoying to wait for a long time for an experiment, especially if you have to do many experiments. For this reason you should make sure that your experiments take "reasonable" time. I recommend something between 5 and 15 seconds.

- Write a program to find a file size which can be read in "reasonable" time.

- Input: block size

- Output: file size

<aside>

💡 Hint: You can start with a small file size and use your program from (1) above to read it and measure the time it takes. You can keep doubling your file size until you get between 5 and 15 seconds.

Way to execute: `./run2 <filename> <block\_size>`

Returns `block\_count` (I will also accept `file\_size`)