Mode is Passed as a String

What are the possible modes?

"r" or **"rb"***   **read only**

"w" or **"wb"**   **write only (after deleting)**

"a" or **"ab"**   **append (write only, at end)**

"r+"/"r+b"/"rb+"   **open r/w** (read/write)

"w+"/"w+b"/"wb+"   **truncate, then r/w**

"a+"/"a+b"/"ab+"   **append r/w**

*The "b" is antiquated notation meaning "binary." On some systems, such as MS-DOS, files opened in non-binary mode changed certain bytes (CR/LF) read/written to the file.

Close a Stream Using `fclose`

What about when one is done with a stream?

Use this function:

     `int *fclose (FILE* stream);`

∘ **stream is the stream** to close.

∘ **returns 0 on success**, or
EOF (-1) on failure.

Do NOT leave streams unclosed;
the number allowed for a program is finite!

Discuss Five Kinds of I/O

We'll talk about five kinds of I/O:
1. one character at a time,
2. reading and writing strings,
3. formatted I/O,
4. binary I/O, and
5. formatted "I/O" to/from strings.

Use `fgetc` or `getc` to Read a Character from a Stream

Let's start with one character at a time.

Remember that streams are buffered.

To read a character, use

     `int fgetc (FILE* stream);`

     `int getc (FILE* stream);`

`fgetc` is a library function.

`getc` is a preprocessor macro.

What's the difference?