

Model 1 Writing to a File

The `java.io.PrintWriter` class is useful for writing text files:

```
File file = new File("results.tsv");
PrintWriter out = new PrintWriter(file);
// output text to the file...
out.close();
```

Questions (15 min)

Start time:

1. Examine the [documentation for PrintWriter](#). What methods can be used to output a string to the file?

append, format, print, printf, println, write

2. Modify your code from Question ?? to output to the `results.tsv` file instead of to the screen. Summarize your changes below:

1. Add the lines from Model 1 to the beginning/end of main.
2. Surround the `PrintWriter` constructor in a try/catch block.
3. Replace each `System.out.println` with just `out.println`.

3. In general, is it easier to write code that reads a file or writes a file? Explain your reasoning.

Writing a file is much easier, because you don't have to parse the file contents and deal with potentially incorrect formatting.

4. Make sure the end of your main method closes both files. Why is it important to close files when you are finished with them?

Closing a file releases any system resources associated with it. And when writing files, the output may not be on disk until it's closed.

5. (Optional) What is the difference between the print methods and the write methods in the `PrintWriter` class?

The print methods should be used most of the time for outputting text. The write methods are lower level and used for printing characters without encoding them based on the current operating environment.