To: Prof. Felleisen
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Subject: Experiences with exploratory programming tasks
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The initial programming tasks performed, B through E, were overall relatively straightforward. The language used to create the programs for this task was Java, and for tasks such as C - JSON and E - TCP, we were able to make use of libraries in order to reduce the complexity of our written code.

For assignment B, the code written was very short; the largest difficulty was understanding how to use the compiled output of our source code as an executable program from the terminal. To this end, we made a script that compiles and runs the compiled output, with all of its arguments passed to the main function of our compiled code.

Assignment C was somewhat more involved, requiring research into viable libraries for Java that were capable of parsing arbitrary JSON input and generating JSON output. We used the Google GSON library, which handled all of the parsing, allowing us to manipulate the data. After some data handling, we returned JSON using the GSON library in order to easily create output.

Assignment D was also more involved in a similar way that Assignment C was; we intended on using JavaFX as our GUI library and spent much time trying to configure it, but ultimately chose Swing because it was both capable and already included in the version of Java installed on the Khoury servers.

Completing Assignment E required research into receiving data over a TCP connection, which led us to use the Apache Commons Net API in order to abstract some of the socket interactions necessary for this assignment. In order to reuse some functionality, we copied the code from C - JSON instead of importing it, as we thought it would require some modifications to be used in this assignment.