Daily Log

Monday January 20

Martin Luther King Junior Day.

Tuesday January 21

One problem with the test cases I used previously was that they all began with a thumb, so I didn't realize that my algorithm automatically assumed a 1 to start every piece. With Fur Elise, the algorithm would trip up and try to start with a 1212 instead of a 5454. To solve this problem, I implemented a scanning method (in conjunction with my motif method) that identifies the first local max or min, then determines hand position, which in turn determines which finger to start on. However, a problem with this solution is that some pieces are too short to establish a significant motif.

Thursday January 23

I made updates to my file output method to accept a different time signature. Fur Elise operates in 3/8 while all my previous test cases were in 4/4. I also wrote a method to keep track of the indices and duration of rests between notes, so I could place them into the LilyPond documentation correctly.

Timeline

Date	Goal	Met
January 10th	Be able to generate a .ly file with correct notes	Created a .ly template
January 17th	Be able to generate a .ly file that reflects the notes and fingering	Created a file output method that generates a .ly file that reflects notes and fingering
January 24th	Debug the program's issues with fingering Fur Elise	INSERT CURRENT STATUS
January 31st	Transfer my right hand fingering algorithm to my left hand	–
February 7th	Algorithm can handle crossovers in succession	–

Reflection

This week, I fixed a areas of my algorithm that were causing errors, including the starting fingering and rests placement in the LilyPond file output method. Next week, I aim to transfer what I've written for the right hand into the left hand. For longer term goals, I hope to test my code on more and more complex pieces - I feel that this is the most effective and practical way to debug problems (especially ones that I may not be aware of yet) and expand my code's capabilities.