Summary and Discussion

Testing and Implementation:

      Over the course of this project we were able to successfully test and compile all of the methods and cases that would verify the soundness of the Printtokens java file and make sure that every test case had an accommodating test method. The primary goal was to ensure that every method executed correctly and had the right output for a broad range of inputs, as well as including edge cases and error conditions.

      We have captured and compared console outputs for such methods like print_token() and print_spec_symbol() which required ByteArrayOutputStream. We have revised other methods such as get_token() to accurately tokenize the string inputs given to the method. Overall, we have ensured that every test case would be covered and accounted for in the testing process.

Testing Preparation:

      We have designed an effective CFG diagram that covers the entire layout of each method that's in Printtokens and listed every test path associated with their respective methods. Along with the test paths, we have derived test cases that assisted us with making sure we covered every test path when developing test methods.

Challenges:

      We have come up to many obstacles that were related to figuring out how to work with the output stream and the token parsing logic related to get_token(). File handling showed to be something we were inexperienced in with file creation and cleanup along with accounting for I/O exception handling.

Participation:

      Both team members, Endrit and Daniel, have applied themselves to their respective tasks for each phase of this project.

Conclusion:

      The project, we believe, is an overall success with all major functionalities passed and verified. We have learned about software testing techniques, working with extensions and programs such as JUnit4 that are related to these tasks, and how to keep up maintenance for software.