Chhun Kim

February 27 2017

Foundations of Computer Science

**DFA Implementation**

Overall, I think I completed 85% of this assignment. I decided to program this in Python. This is a new language to learn for me because I have no experience with Python. However, I found that Python is easier to implement this program rather than C or C++. It was really a hard program for me especially where we have to check possible errors such as command line argument parsing, valid definition file, valid input string etc. That was the hardest part for me, and it was a real challenge. Unfortunately, I could not finish that part. I found this assignment to be an interesting challenge to parse the DFA definition file and use these definitions to run the tool on strings. Running in Python is easier, but it is more difficult to debug the program. When I ran it, it only shows us the line number but it doesn’t really tell us what the errors are.

I found it to be a challenge to implement in Python and import JSON file as input. I was having difficulty understanding when I looked the simple output, and I don’t know what it is meant by “Interactive Run” and “Use of Pipe and Redirection”. Plus, I don’t really know how to implement “./dfa –d m1.dfa <m1.in”, “./dfa –d m1.dfa <m1.in >m1.out”, and “cat m1.in | ./dfa –d m1.dfa”. Therefore, I didn’t really finished that part.