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Extra Credit Readme

In my repo you will see the CSV's for 2x0 DTM as well as abPalindrome. I created these for project 2 in which I created an algorithm to solve for and visualize NTMs. It was important to create DTMs to compare against the NTMs to fully understand the difference between the two. I created the CSV for 2x0, which measures inputs for having two times as many 0s as it does 1s, based on my designs for a similar problem in HW8. abPalindrome, I created fully from scratch, starting with a blank piece of paper, designing, and writing as a CSV. As the name suggests, abPalindrome scans inputs to ensure they are palindromes. In other phrasing, {w | w=w^r, where w^r is the reverse, aka palindrome}.

This was a useful endeavor as it helped me understand the mechanics behind Turing machines and designing them from a CFL. I very much enjoy creating these turing machines and this exercise helped me understand how to create more complex designs as opposed to the simple a* provided in the project description. Because these designs were original, I consider them non-trivial and therefore counting toward extra credit.

As specified by the project description,

"These files may simply be machines from the book (particularly for simple DTMs for basic testing). However, for any nontrivial submission either converted from some non-Sipser-related source or created from scratch, extra credit will be considered for the creators, for a maximum of 6 points divided by the number of creators, and a maximum of 12 total extra credit points per student. The formats for such submissions must be compatible with that defined above so that other groups can use them, and the associated readmes must do adequate jobs of defining where they came from, who create them, and how to use them. Also submit such possible extra credit submissions in the appropriate extra credit entry in canvas."