

Theory of Computing Extra Credit Readme asproul

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2	Extra Credit Readme
3	I created a file for an NTM that recognizes the language b^+ over the alphabet $\{a, b\}$. The machine accepts any arbitrarily long string that has at least one b in it.
4	I chose to create this file for project 2 to test my code. I chose to do this because I wanted to understand non-deterministic turing machines better. Creating this file also helped me verify my project was working correctly because I could test my program on more than one machine. The hardest part of creating this file for me was defining the transitions between states, and creating this machine helped me improve my understanding. On homework 08 I had trouble creating the state diagrams for turing machines prior to working with a TA who walked me through the process of creating them. Getting help from a TA along with creating my own test file for project 2 reinforced my understanding on how turing machines work.
5	<p>The file contains <code>sb.csv</code> contains the NTM. The first seven lines are headers:</p> <ol style="list-style-type: none"> 1. Machine name 2. Set of states Q 3. List of characters from Σ 4. List of characters from Γ 5. Start state 6. Accept state 7. Reject state <p>Following the header there are 3 lines describing the transitions of the machine.</p>