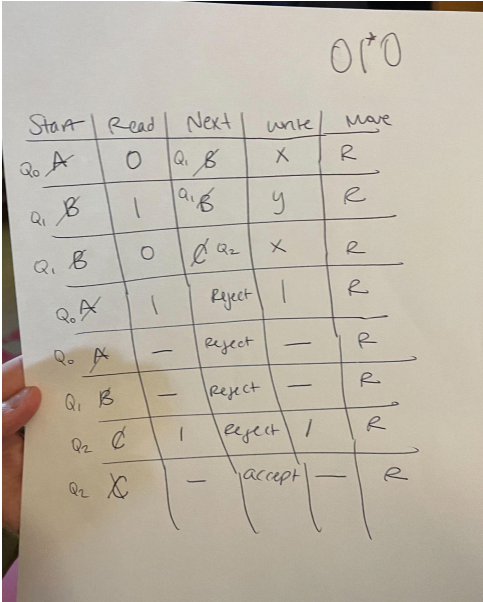


Github Repository Link	https://github.com/oliviaheldring/theory_extra_credit																																													
Description of the work	<p>This project implements a Turing machine to process the input string 01^*0, where 1^* represents a series of one or more 1s.</p> <p>I designed this machine from scratch, using the specified CSV format from our project 2.</p> <p>I first drew out the machine as a state diagram, then converted it to a transition table on paper, and then transitioned it to a csv file.</p>  <table><thead><tr><th>State</th><th>Read</th><th>Next</th><th>Write</th><th>Move</th></tr></thead><tbody><tr><td>q_0 A</td><td>0</td><td>q_1 B</td><td>X</td><td>R</td></tr><tr><td>q_1 B</td><td>1</td><td>q_1 B</td><td>y</td><td>R</td></tr><tr><td>q_1 B</td><td>0</td><td>q_2 C</td><td>X</td><td>R</td></tr><tr><td>q_0 A</td><td>1</td><td>Reject</td><td>1</td><td>R</td></tr><tr><td>q_0 A</td><td>-</td><td>Reject</td><td>-</td><td>R</td></tr><tr><td>q_1 B</td><td>-</td><td>Reject</td><td>-</td><td>R</td></tr><tr><td>q_2 C</td><td>1</td><td>Reject</td><td>1</td><td>R</td></tr><tr><td>q_2 C</td><td>-</td><td>accept</td><td>-</td><td>R</td></tr></tbody></table>	State	Read	Next	Write	Move	q_0 A	0	q_1 B	X	R	q_1 B	1	q_1 B	y	R	q_1 B	0	q_2 C	X	R	q_0 A	1	Reject	1	R	q_0 A	-	Reject	-	R	q_1 B	-	Reject	-	R	q_2 C	1	Reject	1	R	q_2 C	-	accept	-	R
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Why did I choose it and how this helped my understanding.	<p>I chose this particular project because it followed the "nontrivial" requirement while demonstrating a deeper understanding of Turing machines. It helped my understanding because I have struggled with understanding how to develop turing machines. This additional practice helped me in preparation for our final exam.</p>																																													
Explanation of Files	<p>Inside the repo, you will find zero_onestar_zero.csv. This is the CSV file</p>																																													

	<p>that you can easily pass through project 2, and it will successfully show if an input string is accepted by 01^*0.</p> <p>I also put this ReadMe document in the repo.</p>
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