

Due 11/5

Construct a deterministic one way infinite single tape Turing machine that accepts $\{ (01)^n 0^m 2^p \mid n, m, p \geq 0, m < n, p \leq n \}$.

You may not make use of the fact that JFLAP has blank spaces to the left of the input. And you may not use blocks or the stay directive (each transition must either move the read/write head left or right and read a single symbol and write a single symbol) for this Turing machine. And finally, use JFLAP version 7.1 (the version on Brightspace).

Since JFLAP does not specifically have a reject state, you can either have a state that your program transitions to that has no exiting transitions or you can simply leave off invalid transitions (transitions that will never get to the accept state), either of which will cause your Turing machine to reject the input.

My Turing machine for a similar language had 28 states, but was very inefficient as far as the number of states.

E-mail the JFLAP file to me (david.garrison@binghamton.edu) by 11:59:59.999pm on the date due. The filename must be your last name followed by “_p5.jff” (as an example, my filename would be “garrison_p5.jff”). The subject of your e-mail is to be “CS 373 program 5”.

For this programming assignment, and the remainder of them for the semester, you need to follow my submission directions – filename (lower case last name followed by “_p5.jff”) and e-mail subject (“CS 373 program 5”).