

# HOMEWORK III

## CMPE 326 - Formal Languages & Automata

Due: June 14, 2021, 23:59

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(100p) Design a Turing machine that sums two binary numbers in the tape. You are expected to start writing the result from the left (in reverse, after numbers) and then reverse this result. The numbers should be entered with the pattern: #num1#num2#

For example, for input #101#110#

The tape should first look like: #101#110#1101,

Then you should reverse the result: #101#110#1011.

Use **Turing Machine Visualization** online tool <https://turingmachine.io/> to create and trace your Turing Machine. Please, read descriptions and usage information on the website.

After you are done with your Turing Machine, click Share button and Download Document as a .yaml file, then upload this file on Moodle as your assignment.