

## CSCI 338: Quiz 2 (due: Friday, March 12, 8:00pm)

Your Name:

This is an open-book quiz (not an attendance counting), so you should try your best. After you finish, upload a pdf file on D2L under Quiz-2. A solution will be posted on D2L after the deadline.

### Problem 1

Based on what we covered on March 5 and 8 regarding the Turing machines, list at least 3 differences between a Turing machine and PDA.

- ① The storage in a TM is an infinite tape which can be accessed in both ways. In the PDA, the storage is a stack, which can be accessed at one end only.
- ② The input for TM could be altered by it, while a PDA doesn't change the input at all.
- ③ The TMs we covered on Mar 5 and 8 are deterministic, while PDA is non-deterministic.
- ④ You read the input from left to right by a PDA, you can't say that with a TM (once the first letter is read).
- ⑤ ...

