Course Code: CS302	Course Name: Theory of Automata
Instructor Name / Names: Zeshan Khan	

Student Roll No:	Section: C

Instructions:

- In case of any ambiguity, you may make assumption. But your assumption should not contradict any statement in the question paper.

Deadline: 04-May-2019   **Max Marks: 5**

Question # 1

Implement Deterministic Push Down Automata (PDA). The code should read the transition table and inputs from files (transition_table.txt,input.txt) and writes its outputs (Accept/Reject) in a file (output.txt).

State types

1=>start

2=>accept

3=>read

4=>pop

5=>push

x for empty symbol and states

The format of the files should be as follows:

transition_table.txt

source_state tab transition_label tab destination_state tab state_type

1	x	2	1
2	a	3	3
2	b	4	3
3	x	2	5

4	a	2	4
2	d	5	3
5	d	6	4
6	x	x	2

input.txt

aaabbb

abab

bba

output.txt

Accept

Accept

Reject

Question # 2

Implement a Turing Machine similar to the concept of PDA. The transition table is different and you are open to use transition table in any format but provide that format with the assignment code.

Best of Luck!