

**CS 301 THEORY OF AUTOMATA SECTION C**  
**QUIZ 6: TURING MACHINES**

**PROBLEM**

Construct a deterministic Turing machine that recognizes a binary string with zero at the second last position

**SOLUTION**

Here B denotes blank

NOTE: Make sure the tape has at least two binary digits. Some students made the solution that accepts only one zero. Keep in mind that issuing a “move left” command when the tape head is at the left most symbol will not move the tape head at all. It will stay at the same place.

