Illinois Institute of Technology
Department of Computer Science

CS 330 Discrete Structures

Fall Semester, 2010

Quiz 3

Oct. 15th, 2010

1. Prove that in a bit string, the string 01 occurs at most one more time than the string 10.

2. Assume that a chocolate bar consists of n squares arranged in a rectangular pattern. The bar, a smaller rectangular piece of the bar, can be broken along a vertical or a horizontal line separating the squares. Assuming that only one piece can be broken at a time, determine how many breaks you must successively make to break the bar into n separate squares.