D. **Linear Solitaire**

Input File: D.txt
Run Time Limit: 10 sec

Given a peg board made up of a long sequence of equally spaced holes and some pegs initially placed in holes, can you reduce the board to a single peg by repeatedly applying the following move:

A peg at position i with a neighboring peg at position $i+1$ and a gap at position $i+2$ can be reduced to a single peg at position $i+2$ by making the peg at position i jump over and take its immediate neighbor. The rule can equally be applied by making a peg jump over and take its immediate neighbor to the left if that neighbor has a gap to its left. These two situations are illustrated in the diagram below.

Two possible moves for the peg at position i
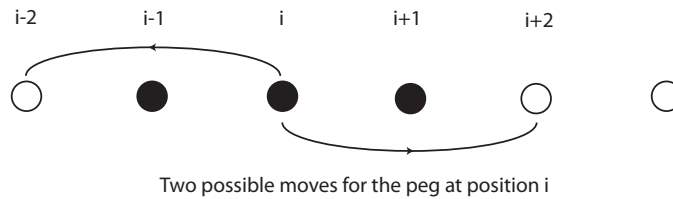
Input:
There will be multiple board descriptions, each occupying a single line of text. A board description will be a binary sequence such as 0110100 where 0 means the absence of a peg and 1 means the presence of a peg. The board above would be described by the string 011100 and the two moves indicated would result in boards 100100 and 010010.

A board description will not be longer than 20 symbols.
Input is terminated by end of file.

Output:
For each board description output the single line of text containing the case number, as shown below, 'yes' if the board can be reduced to a single peg, and 'no' if it cannot.

Sample Input	Expected Output
1	Case 1: yes
0	Case 2: no
1111	Case 3: no
1110111	Case 4: no
111110	Case 5: no
0110	Case 6: yes
010111100	Case 7: yes
0110010110	Case 8: yes