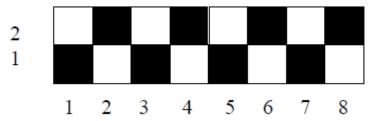
CALIFORNIA STATE UNIVERSITY, LOS ANGELES PROGFEST 2012

Problem 4 Jumping Checkers



Problem: Checkers is always played on an 8 x 8 grid. The checker pieces are placed on the black squares of the grid only. Each piece moves towards the other end of the grid by moving to an unoccupied, adjacent black square. For example, a checker piece at location (1, 1) would move to location (2, 2) if it were unoccupied. Pieces may "jump" over and capture an opponent's checker piece if that piece is in an adjacent black square and the landing black square is unoccupied. I.E. a checker at location (1, 1) could "jump" over an opponent's checker at location (2, 2) if location (3, 3) was unoccupied. For this game, your "home row" is row 1 and your opponent's home row is row 8. If your checker lands in your opponent's home row, the checker becomes a "king" and can then jump both forwards and backwards.

Input: The number and location of your checkers, followed by the number of your opponent's checkers and their locations. Locations are given in ordered pair format (row, column). Sample In put line #1 below indicates that you have 1 checker at location (1, 5), and your opponent has 2 checkers at locations (2,6) and (4,6).

Output: Given the board setup, it will be your move. You must make the move that gives the most jumps. Your output will be the greatest number of jumps possible for one move.

Sample Input	Sample Output
1,1,5,2,2,6,4,6	2
1,6,2,3,7,3,7,5,5,7	3
1,1,5,3,2,4,2,6,4,6	2
2,1,3,1,5,6,2,4,2,6,4,2,4,6,6,6,4,4	3