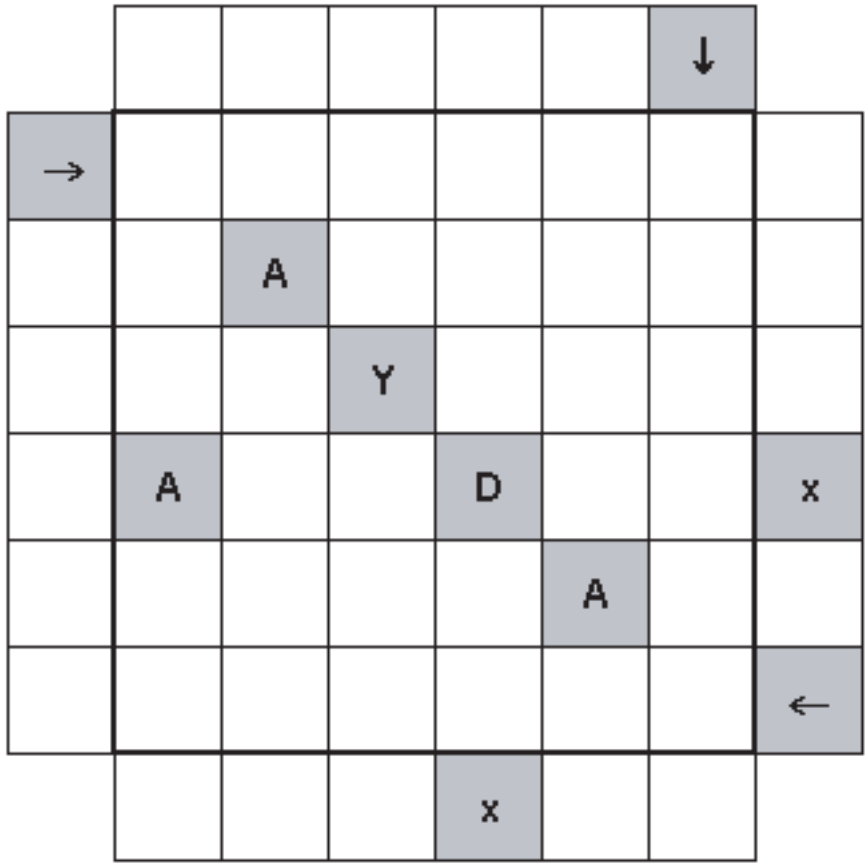
Puzzle ID : **INPC2005-03**

AYDA

AYDA name must be read in every column; either upward or downward, and also must be read in every row; either left to right or right to left. Arrows indicating that AYDA name must be written in that direction, x is indicating that; cell is empty.

AYDA



Answer Key: Write the letters in the 6x6 square row by row, using x at blank cells.

Puzzle ID : **INPC2005-04**

Best set for maximum of differences

Choose an integer n with n>=2. Select a set of n different integers between 1 and (n*n-n+2)/2. You can choose if you wish 1 and/or (n*n-n+2)/2 in the set. Then form, for each couple of numbers among the set, the absolute difference of the two numbers of the couple, and count the number of different differences you obtain. Let's call it d. Your job is to maximize M= n*n/(n*n-2*d). For example if I choose n=6 and the set (1,2,3,5,10,16), then I get for the differences : 1,2,3,4,5,6,7,8,9,11,13,14 and 15, that is 13 different numbers. So d=13 and M=36/36-26=3,6

Answer Key: For your answer, give the value of n and the choosen set of n numbers.For the example, the answer key is : 6;(1,2,3,5,10,16)