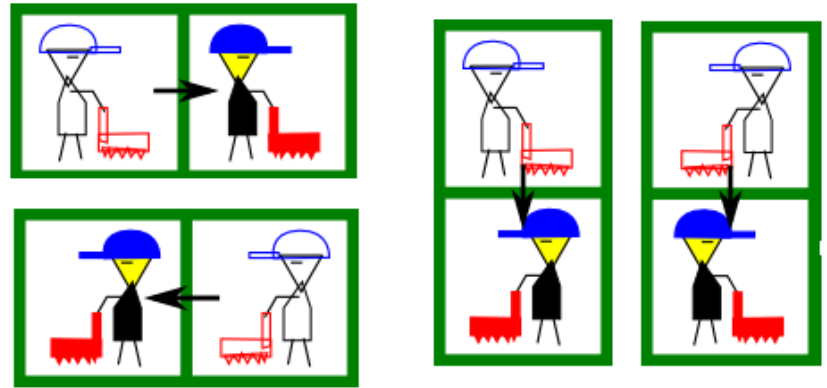
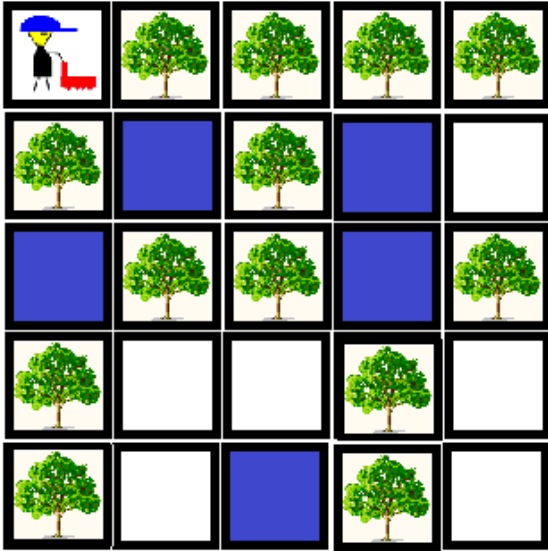


12474. MAXIMUM WOOD CUTTER

Problem code: MAXWOODS

Problem Statement:



At each step,
 If you face right,
 you can move one step right
 you can move one step down and face left
 If you face left,
 you can move one step left
 you can move one step down and face right

The image explains it all. You initially step at 0,0 facing right. At each step you can move according to the conditions specified in the image. You cannot step into the blocked boxes (in blue). Find the maximum number of trees you can cut.

Input:

The first line consists of an integer t , the number of test cases. For each test case the first line consists of two integers m and n , the number of rows and columns. Then follows the description of the matrix M .

$M[i][j]='T'$ if the region has a tree.

$M[i][j]='#'$ if the region is blocked.

$M[i][j]='0'$ (zero) otherwise.

Output:

For each test case find the maximum trees that you can cut.

Input Constraints:

$1 \leq t \leq 10$

$1 \leq m, n \leq 200$

Example:

Sample Input:

4
5 5
0TTTT
T#T#0
#TT#T
T00T0
T0#T0
1 1
T
3 3
T#T
TTT
T#T
1 1
#

Sample Output:

8
1
3
0

Solution for test case #1:

