import math

import os

import random

import re

import sys

def twoPluses(grid):

empty = []

count = 0

for i in range(1, n - 1, 1):

for j in range(1,len(grid[i]) - 1 , 1):

if grid[i][j] == 'N':

for inl in range(min(m - j - 1, n - i - 1, i , j)):

ls = []

count = 0

for k in range(-min(m - j - 1, n - i - 1, i , j) + inl, min(m - j - 1, n - i - 1, i , j)+1 - inl , 1):

if (grid[i + k][j] == "N"):

ls.append([i + k,j])

count = count + 1

if (grid[i][j + k] == "N") & (k != 0):

ls.append([i,j + k])

count = count + 1

if (count+1) == len(range(-min(m - j - 1, n - i - 1, i , j) + inl, min(m - j - 1, n - i - 1, i , j)+1 - inl , 1))\*2:

empty.append(ls)

max\_area = 1

check = empty

if len(empty) > 2:

for arr in range(len(check)):

for nex in range(arr, len(check),1):

if arr != nex:

cnt = 0

for x in check[arr]:

for y in check[nex]:

# print(x,y)

if (x[0] == y [0]) & (x[1] == y[1]):

cnt = cnt + 1

# print(cnt)

break

if (cnt == 0) & (max\_area < (len(check[arr])\*len(check[nex]))):

max\_area = len(check[arr])\*len(check[nex])

elif len(empty) == 2:

for arr in range(len(check)):

for nex in range(arr, len(check),1):

if arr != nex:

cnt = 0

for x in check[arr]:

for y in check[nex]:

if (x[0] == y [0]) & (x[1] == y[1]):

cnt = cnt + 1

break

if cnt == 1:

max\_area = max((len(check[arr]),len(check[nex])))

else:

max\_area = (len(check[arr])\*len(check[nex]))

elif len(check) == 1:

max\_area = len(check[0])

else:

max\_area = max\_area

return max\_area

if \_\_name\_\_ == '\_\_main\_\_':

nm = input().split()

n = int(nm[0])

m = int(nm[1])

grid = []

for \_ in range(n):

grid\_item = input()

grid.append(grid\_item)

bol=False

for x in range(0,n):

for y in range(0,m):

if(grid[x][y]=="N"):

bol=True

if(bol==True):

result = twoPluses(grid)

print(str(result) + '\n')

else:

print(0)