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PROG: backbarn

LANG: C++

ID: hayk.sa1

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#include <stdio.h>

int n, m, num;

char s[10][10];

int di[4] = {-1, 0, 0, 1};

int dj[4] = {0, -1, 1, 0};

void count(int i, int j, int l)

{

if (i == n-1 && j == m-1)

{

num++;

return;

}

if (l == 0)

return;

int k, p, q;

for (k = 0; k < 4; k++)

{

p = i+di[k];

q = j+dj[k];

if (p >= 0 && p < n && q >= 0 && q < m && s[p][q] == '.')

{

s[p][q] = '#';

count(p, q, l-1);

s[p][q] = '.';

}

}

}

int main()

{

freopen("backbarn.in", "r", stdin);

freopen("backbarn.out", "w", stdout);

int l, i;

scanf("%d%d%d", &n, &m, &l);

for (i = 0; i < n; i++)

scanf("%s", s[i]);

s[0][0] = '#';

count(0, 0, l-1);

printf("%d\n", num);

return 0;

}