Problem Link:

<https://leetcode.com/problems/push-dominoes/?envType=daily-question&envId=2025-05-02>

Solution:

class Solution {

public:

string pushDominoes(string dominoes) {

int n = dominoes.size();

vector<int> forces(n, 0);

int force = 0;

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

{

if(dominoes[i] == 'R')

{

force = n;

}

else if(dominoes[i] == 'L')

{

force = 0;

}

else if(force > 0)

{

force--;

}

forces[i] += force;

}

force = 0;

for(int i = n - 1; i >= 0; i--)

{

if(dominoes[i] == 'L')

{

force = n;

}

else if(dominoes[i] == 'R')

{

force = 0;

}

else if(force > 0)

{

force--;

}

forces[i] -= force;

}

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

{

if(forces[i] > 0)

{

dominoes[i] = 'R';

}

else if(forces[i] < 0)

{

dominoes[i] = 'L';

}

else

{

dominoes[i] = '.';

}

}

return dominoes;

}

};