1h 11m left

ALL

<u>(i)</u>

1

2

3

4

5

6

7

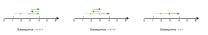
8

9

11. Paths to a Goal

Given a number line from 0 to *n* and a string denoting a sequence of moves, determine the number of subsequences of those moves that lead from a given point *x* to end at another point y. Moves will be given as a sequence of I and rinstructions. An instruction *l* = left movement, so from position *j* the new position is *j* - 1, and an instruction r =right movement, so from position *j* the new position would be i + 1.

For example, given a number line from 0 to 6, and a sequence of moves *rrlrlr*, the number of subsequences that lead from 1 to 4 on the number line is 3, as shown below.



Note: Subsequences are created by deleting *0* or more elements from a sequence

```
C++
                        Autocomplete Ready ()
     #include <bits/stdc++.h> ...
 9
     /*
10
11
      * Complete the 'distinctMoves' function below.
12
      * The function is expected to return an INTEGER.
13
      * The function accepts following parameters:
14
         1. STRING s
15
         2. INTEGER n
16
         3. INTEGER x
17
18
         4. INTEGER y
19
      */
20
21
     int distinctMoves(string s, int n, int x, int y) {
22
23
     }
24
25
     int main() ...
```