Total Diagonal moves

You're given an N x N grid, the columns are represented as letters A, B, C and the rows are represented as numbers starting from 0. Find the minimum number of diagonal moves required to move from the source to destination.

Diagonal moves are described as moving diagonally on the grid, if you're moving A0 to C2 i.e. A0 -> B1 -> C2 then it counts as 1 move since they lie on the same diagonal. If you change the direction of diagonal, it will count as another move.

Input:

The first line represents N.
The second line represents the starting location.
The third line represents the destination location.

Output:

Print minimum number of diagonal moves, else print -1 if reaching the destination is not possible.

Constraints:

- 1 <= N <= 26
- Columns inputs uppercase letters.

Sample:

No.	Sample Input	Sample Output
1	3 A0 C0	2
2	3 A0 B0	-1