

## Problem

Given two strings A and B. Find the minimum number of steps required to transform string A into string B. The only allowed operation for the transformation is selecting a character from string A and inserting it in the beginning of string A.

## Example

### Input:

```
A = "abd"
B = "bad"
```

### Output:

```
1
```

### Explanation:

The conversion can take place in  
1 operation: Pick 'b' and place it at the front.

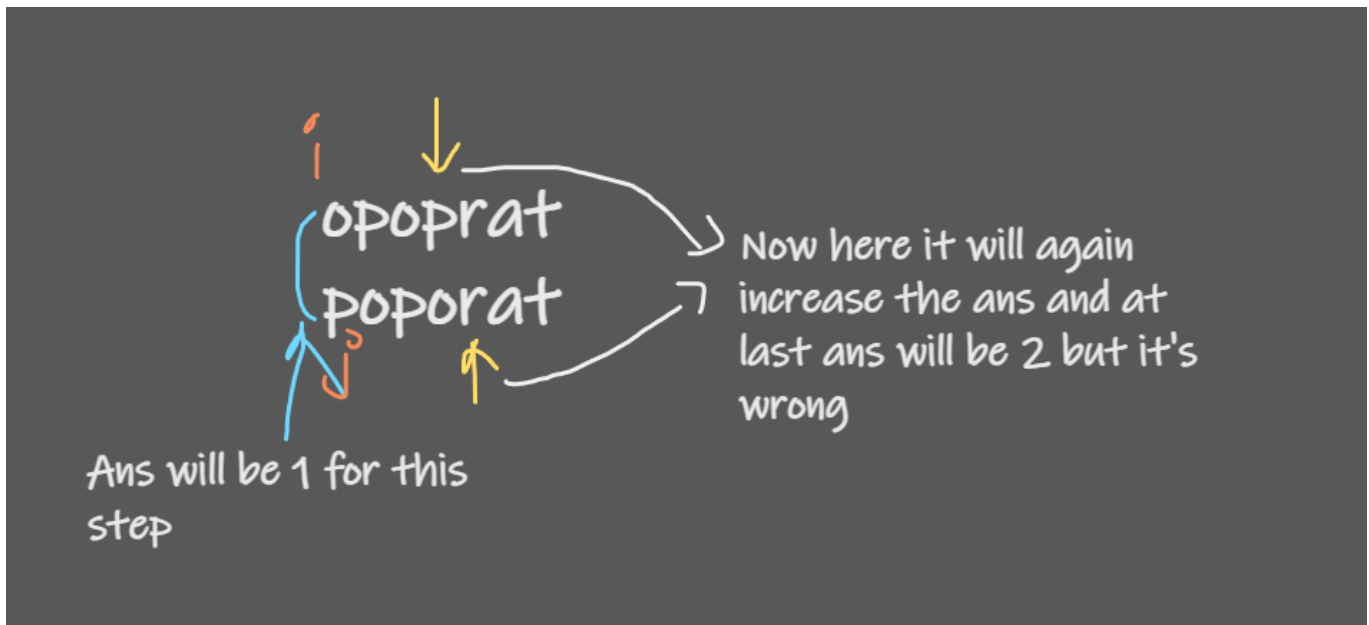
### Approach:

→ Here we will use 2 pointer approach and we will start from end of the both strings.

For example we have 2 pointers `i` and `j` and now we have 2 conditions here:

1. If `a[i]==b[j]` then we will decrease both `i` and `j`
2. If `a[i]!=b[j]` then we will Only decrease `i` and increase the `ans`

we could start from 0 then we have to increase j if both elements are not equal and if both are equal then increase both i and j. But this logic gives wrong answer which we can see in below image.



So that's why we have to start *i* and *j* from *n-1*

Final code will look like this:

```
int transform (string A, string B)
{
    unordered_map<char,int>freq;
    for(int i=0;i<A.size();i++){
        freq[A[i]]++;
    }
    for(int i=0;i<B.size();i++){
        freq[B[i]]--;
    }
    for(auto it:freq){
        // If any variable is different in both
        strings then we can't get desired string so we will return -1.
        // Because both strings have equal and
        same number of characters.
        if(it.second != 0){
```

```
        return -1;
    }
}
int n = A.size();
int i = n-1, j=n-1;
int ans = 0;
while(i ≥ 0 && j ≥ 0){
    if(A[i] = B[j]){
        i--;
        j--;
    }
    else if(A[i] ≠ B[j]){
        i--;
        ans++;
    }
}
return ans;
}
```