

ASK/VIEW DOUBT

SOLUTION

HINT

Problem

Result

Send Feedback

Shortest Subsequence

Send Feedback

Gary has two string S and V. Now Gary wants to know the length shortest subsequence in S such that it is not a subsequence in V.

Note: input data will be such so there will always be a solution.

Input Format :

Line 1 : String S of length N (1 <= N <= 1000)

Line 2 : String V of length M (1 <= M <= 1000)

Output Format :

Length of shortest subsequence in S such that it is not a subsequence in V

Sample Input :

babab

babba

PREVIOUS

NEXT

1

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```
int solve(string S,string V)
{
    // Write your code here.
    int m = S.length();
    int n = V.length();

    int out[m+1][n+1] , next[m+1][n+1];

    for(int i = 0; i < m; i++){
        int prev = -1;
        for(int j = 0; j < n; j++){
            if(S[i] == V[j]){
                prev = j;
                next[i+1][j+1] = prev;
            }
        }
    }

    for(int i=0;i<=m;i++){
        for(int j=0;j<=n;j++){
            if(j==0)
                out[i][j] = 1;
            else if(i==0)
                out[i][j] = 1000000000;
            else{
                int index = -1;
                for(int q=j-1;q>=0;q--){
                    if(V[q]==S[i-1]){
                        index = q;
                        break;
                    }
                }
                if(index==-1){
                    out[i][j] = 1;
                    continue;
                }else{
                    out[i][j] = min(out[i-1][j],out[i-1][index]+1);
                }
            }

            if(next[i][j] == -1)
                out[i][j] = 1;
            else{
                out[i][j] = min(out[i-1][j],1 + out[i-1][next[i][j]]);
            }
        }
    }

    /*for(k=j-1;k>=0;k--){
        if(V[k]==S[i-1])
            break;
    }
    if(k== -1)
        output[i][j]=1;
    else
        output[i][j]=min(output[i-1][j],output[i-1][k]+1);*/
}

return out[m][n];
```

CUSTOM INPUT

SUBMIT SOLUTION