//edit distance dynamic programming

#include<iostream>

#include<string>

using namespace std;

int min(int x, int y, int z)

{

return min(min(x, y), z);

}

int minEditDistance(string s1, string s2, int m, int n){

int dis[m+1][n+1];

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

{

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

{

if(i==0)

dis[i][j]=j;

else if (j==0)

dis[i][j]=i;

else if(s1[i-1]==s2[j-1])

dis[i][j]=dis[i-1][j-1];

else

dis[i][j]= 1+ min(dis[i-1][j],dis[i][j-1],dis[i-1][j-1]);

}

}

return dis[m][n];

}

int main(){

string s1="monday";

string s2="sunday";

cout<<minEditDistance(s1,s2, s1.length(),s2.length());

return 0;

}