#We compare the common elements in both the strings  
#LCS is the mother of all string comparison  
#There are few exceptions   
Example:  
S1 =aabbcdde  
S2=aaacdbccdef  
1) The first two “a” can only match with the two “a” in s2  
2) The only c in s1 cannot match with the “c” in s2 which after “b”  
it can only match with “c” before “d” that’s the rule of LongestCommonSub

public class LongestCommonSubsequnce

{

public static int lcs(String s1,String s2)

{

int len1=s1.length();

int len2=s2.length();

int [][] dp=new int[len1+1][len2+1];

for (int i=0 ;i<len1+1; i++)

{

for (int j=0 ;j<len2+1 ;j++)

{

if (i==0 || j==0)

{

dp[i][j]=0;

}

else if (s1.charAt(i-1)==s2.charAt(j-1))

{

dp[i][j]=1+dp[i-1][j-1];

}

else

{

dp[i][j]=Math.max(dp[i][j-1],dp[i-1][j]);

}

}

}

return dp[len1][len2];

}

public static void main(String args[])

{

String s1="aabbcdde";

String s2="aaacdbccdef";

int answer=lcs(s1,s2);

System.out.println(answer);

}

}

Ansswer = 6