Substring -while comparing two string the characters in two string but be same as well as continuous

Subsequence -in Subsequence the characters are not continuous with some exceptions as discussed earlier

public class LongestCommonSubstring

{

public static int lcs(String s1,String s2)

{

int len1=s1.length();

int len2=s2.length();

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

int result=0;

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)) #if the characters are equal the we add 1 and check further

{

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

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

}

else #we want the continuous substring matching

{

dp[i][j]=0;

}

}

}

return result;

}

public static void main(String args[])

{

String s1="aabbcdde";

String s2="abacdbccdef";

int answer=lcs(s1,s2);

System.out.println(answer);

}

}

Answer – 2 ( only ab matches – because the ab is present in both the strings and they are continuous )