**Code for LCS:**

import java.util.\*;

class lcs{

public static void main(String[] args){

Scanner sc = new Scanner(System.in);

System.out.println("Enter String 1");

String s1 = sc.next();

System.out.println("Enter String 2");

String s2 = sc.next();

int m=s1.length();

int n=s2.length();

int[][] lcstable = new int[m+1][n+1];

char[][] dir = new char[m+1][n+1];

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

lcstable[i][0]=0;

dir[i][0] = '-';

}

for(int i=0;i<=n;i++){

lcstable[0][i]=0;

dir[0][i] = '-';

}

for(int i=1;i<=m;i++){

for(int j=1;j<=n;j++){

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

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

dir[i][j] = 'D';

}

else if(lcstable[i-1][j]>=lcstable[i][j-1]){

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

dir[i][j] = 'U';

}

else{

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

dir[i][j] = 'L';

}

}

}

System.out.println();

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

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

System.out.print(lcstable[i][j]+" ");

}

System.out.println();

}

System.out.println();

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

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

System.out.print(dir[i][j]+" ");

}

System.out.println();

}

System.out.println();

System.out.println("LCS of the two strings is " + lcstable[m][n]);

}

}

**Output:**

Enter String 1

abcbdab

Enter String 2

Bdcaba

0 0 0 0 0 0 0

0 0 0 0 1 1 1

0 1 1 1 1 2 2

0 1 1 2 2 2 2

0 1 1 2 2 3 3

0 1 2 2 2 3 3

0 1 2 2 3 3 4

0 1 2 2 3 4 4

- - - - - - -

- U U U D L D

- D L L U D L

- U U D L U U

- D U U U D L

- U D U U U U

- U U U D U D

- D U U U D U

LCS of the two strings is 4

\*\* Process exited - Return Code: 0 \*\*