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import java.util.*;

public class EditDistanceStrings
{
    final static int ERROR_INPUT = -1;

    private int min(int a, int b)
    {
        return (a<b)?a:b;
    }

    private int min(int a, int b, int c)
    {
        return min(min(a,b),c);
    }

    public int findDistance(String str1, String str2, int m, int n)
    {
        if (str1 == null || str2 == null)
        {
            return ERROR_INPUT;
        }

        if (m == 0)
        {
            return n;
        }

        if (n == 0)
        {
            return m;
        }

        if (str1.charAt(m-1) == str2.charAt(n-1))
        {
            return findDistance(str1, str2, m-1, n-1);
        }

        return min (
            1 + findDistance(str1, str2, m-1, n),

```

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        1 + findDistance(str1, str2, m, n-1),
        1 + findDistance(str1, str2, m-1, n-1)
    );
}

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public int findDistance(String str1, String str2)
{

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    if (str1 == null || str2 == null)
    {
        return ERROR_INPUT;
    }

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    int[][] distanceTable = new int[str1.length()+1][str2.length()+1];

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    int numRows = str1.length() + 1;
    int numCols = str2.length() + 1;

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    for (int m = 0; m < numRows; m++)
    {
        for (int n = 0; n < numCols; n++)
        {

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            if (m == 0)
            {
                distanceTable[m][n] = n;
            }

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            else if (n == 0)
            {
                distanceTable[m][n] = m;
            }

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            else if (str1.charAt(m-1) == str2.charAt(n-1))
            {
                distanceTable[m][n] = distanceTable[m-1][n-1];
            }

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            else

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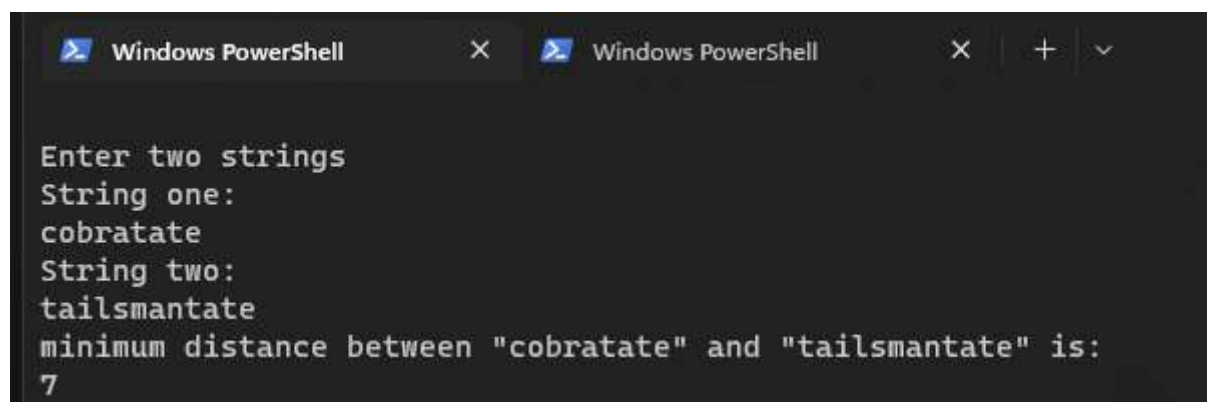
```

        {
            distanceTable[m][n] = min (
                1 + distanceTable[m-1][n],
                1 + distanceTable[m][n-1],
                1 + distanceTable[m-1][n-1]
            );
        }
    }
}

return distanceTable[numRows-1][numCols-1];
}

public static void main(String[] args)
{
    EditDistanceStrings solution = new EditDistanceStrings();
    // Take two strings
    System.out.println("Enter two strings");
    Scanner sc = new Scanner(System.in);
    System.out.println("String one: ");
    String s1 = sc.nextLine();
    System.out.println("String two:");
    String s2 = sc.nextLine();
    sc.close();
    // System.out.print("minimum edit distance between+ \"intention\" and \"execution\"
is: \n" );
    System.out.println("minimum distance between \""+s1+"\" and \""+s2+"\" is:");
    System.out.println(solution.findDistance(s1 , s2 ));
}
}

```



```

Windows PowerShell
Enter two strings
String one:
cobratate
String two:
tailsmantate
minimum distance between "cobratate" and "tailsmantate" is:
7

```