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#lcs
def lcs(X, Y):
    m = len(X)
    n = len(Y)

    C = [[None]*(n + 1) for i in range(m + 1)]

    for i in range(m + 1):
        for j in range(n + 1):
            if i == 0 or j == 0 :
                C[i][j] = 0
            elif X[i-1] == Y[j-1]:
                C[i][j] = C[i-1][j-1]+1
            else:
                C[i][j] = max(C[i-1][j], C[i][j-1])
    #print(C)
    for i in range(m+1):
        for j in range(n+1):
            print(C[i][j],end=" ")
        print()
    print()

    return C[m][n]

# main func
X = "ABCB DAB"
Y = "BDCABA"
# str1=input("enter the 1st string:")
# print("1st string:",str1)
# str2=input("enter the 2nd string:")
# print("2nd string:",str2)
print("Length of LCS is",lcs(X,Y))

```

