**LCS CODE:**

#include <bits/stdc++.h>

using namespace std;

int lcs(string X, string Y, int m, int n)

{

if (m == 0 || n == 0)

return 0;

if (X[m - 1] == Y[n - 1])

return 1 + lcs(X, Y, m - 1, n - 1);

else

return max(lcs(X, Y, m, n - 1),

lcs(X, Y, m - 1, n));

}

int main()

{

string S1;

string S2;

cout<<"enter 1st string"<<"\n";

cin>>S1;

cout<<"enter 2nd string"<<"\n";

cin>>S2;

int m = S1.size();

int n = S2.size();

cout << "Length of LCS is " << lcs(S1, S2, m, n);

return 0;

}

**OUTPUT:**

enter 1st string

AGGTAB

enter 2nd string

GXTXATB

Length of LCS is 4