

```

1: // Longest Common Subword
2:
3: #include<stdio.h>
4:
5: int size(char A[]){
6:     int c=0,i=0;
7:     while(A[i]!='\0'){
8:         i=i+1;
9:         c=c+1;
10:    }
11:    return c+1;
12:
13: }
14:
15: int LCW(char A[],char B[]){
16:     int LCW[size(A)][size(B)];
17:     for(int r=0;r<size(A);++r)
18:         LCW[r][size(B)-1]=0;
19:     for(int c=0;c<size(B);++c)
20:         LCW[size(A)-1][c]=0;
21:
22:     int maxval=0;
23:
24:     for(int c=size(B)-2;c>=0;--c){
25:         for(int r=size(A)-2;r>=0;--r){
26:             if(A[r]==B[c])
27:                 LCW[r][c]=1+LCW[r+1][c+1];
28:             else
29:                 LCW[r][c]=0;
30:             if(LCW[r][c]>maxval)
31:                 maxval=LCW[r][c];
32:         }
33:     }
34:     for(int i=0;i<size(A);++i)
35:     {
36:         for(int j=0;j<size(B);++j)
37:             printf("|%d ",LCW[j][i]);
38:         printf("\n");
39:     }
40:     return maxval;
41:
42: }
43:
44:
45: int main(){
46:     char A[]="secret";
47:     char B[]="bisect";
48:     int p=LCW(A,B);
49:     printf("\n ANS: %d",p);
50: }

```