

**OTH Struct dan Stack**



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## 1. Source code :

```
1  #include <stdio.h>
2
3  struct Node {
4      struct Node* link;
5      char alphabet;
6  };
7
8  int main() {
9      struct Node 11, 12, 13, 14, 15, 16, 17, 18, 19;
10     11.link = NULL;
11     11.alphabet = 'F';
12
13     12.link = NULL;
14     12.alphabet = 'M';
15
16     13.link = NULL;
17     13.alphabet = 'A';
18
19     14.link = NULL;
20     14.alphabet = 'I';
21
22     15.link = NULL;
23     15.alphabet = 'K';
24
25     16.link = NULL;
26     16.alphabet = 'T';
27
28     17.link = NULL;
29     17.alphabet = 'N';
30
31     18.link = NULL;
32     18.alphabet = 'O';
33
34     19.link = NULL;
35     19.alphabet = 'R';
36
37     17.link = &11; //N -> F
38     11.link = &18; //F -> O
39     18.link = &12; //O -> M
40     12.link = &15; //M -> K
41     15.link = &13; //K -> A
42     13.link = &16; //A -> T
43     16.link = &19; //T -> R
44     19.link = &14; //R -> I
45     14.link = &17; //I -> N
46
47     char word[] = {
48         13.link->link->link->alphabet,
49         13.link->link->link->link->alphabet,
50         13.link->link->link->link->link->alphabet,
51         13.link->link->link->link->link->link->alphabet,
52         13.link->link->alphabet,
53         13.link->link->link->link->link->link->link->alphabet,
54         13.link->link->link->link->link->link->link->link->link->alphabet,
55         13.link->link->link->link->link->link->link->link->link->link->alphabet,
56         13.link->link->link->alphabet,
57         13.link->link->link->link->link->link->link->link->alphabet,
58         13.link->link->link->link->link->link->link->link->link->link->alphabet
59     };
60
61     printf("%s", word);
62
63     return 0;
64 }
65
```

## Output :



```

PS E:\Documents\ITTS\SEMESTER 2\ALPRO\OTH STRUCT STACK> cd "e:\Documents\ITTS\SEMESTER 2\ALPRO\OTH STRUCT STACK\" ; if ($?) { gcc othStructStack.c -o othStructStack } ; if ($?) { .\othStructStack }
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PS E:\Documents\ITTS\SEMESTER 2\ALPRO\OTH STRUCT STACK>
  
```

## Penjelasan :

- Line 3-6 adalah pembuatan struct Node yang berisi link dan alphabet
- Lalu dalam block main terdapat inisialisasi struct Node 11-19
- Line 10-35 penginisialisasian alphabet dan link sementara dengan value NULL
- Line 37-45 penyambungan satu persatu struct sesuai yang diminta oleh soal
- Line 47-59 berisi array string untuk menyimpan kata yang ingin dibentuk dengan pemanggilan sesuai yang sudah tersambung(linked)

## 2. Source code Hackerrank :


```
#include <stdio.h>

int main() {
    long long int c, i, g, m, n, x, la, lb;
    long long int a[100010], b[100010];
    scanf("%lld", &g);
    while (g--) {
        la = lb = 0;
        scanf("%lld%lld%lld", &n, &m, &x);
        scanf("%lld", &a[1]);
        for (i = 1; ++i <= n;) {
            scanf("%lld", &a[i]);
            a[i] += a[i - 1];
        }
        scanf("%lld", &b[1]);
        for (i = 1; ++i <= m;) {
            scanf("%lld", &b[i]);
            b[i] += b[i - 1];
        }
        la = 1;
        while (la <= n && a[la] <= x)
            la++;
        lb--;
        c = la;
        lb = 1;
        while (lb <= m && b[lb] <= x) {
            if (la && b[lb] + a[la] > x)
                la--;
            else {
                if (c < la + lb)
                    c = la + lb;
                lb++;
            }
        }
        printf("%lld\n", c);
    }
    return 0;
}
```

## Output HackerRank :

### Congratulations!

You have passed the sample test cases. Click the submit button to run your code against all the test cases.

 **Sample Test case 0**

Input (stdin)[Download](#)

1	1
2	5 4 10
3	4 2 4 6 1
4	2 1 8 5

Your Output (stdout)

1	4
---	---

Expected Output[Download](#)

1	4
---	---