

Two Stacks in an Array

```
class twoStacks {
private:
    int arr[1000]; // Shared array for both stacks
    int top1, top2; // Pointers for stack1 and stack2
    int size;

public:
    twoStacks() {
        size = 1000;
        top1 = -1;
        top2 = size;
    }

    // Function to push an integer into stack1
    void push1(int x) {
        if (top1 < top2 - 1) {
            arr[++top1] = x;
        }
    }

    // Function to push an integer into stack2
    void push2(int x) {
        if (top1 < top2 - 1) {
            arr[--top2] = x;
        }
    }

    // Function to remove an element from top of stack1
    int pop1() {
        if (top1 >= 0) {
            return arr[top1--];
        }
        return -1;
    }

    // Function to remove an element from top of stack2
    int pop2() {
        if (top2 < size) {
            return arr[top2++];
        }
        return -1;
    }
};
```

90% Refund

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Problem

Editorial

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C++ (g++ 5.4)

Start Timer

Output Window

Compilation Results

Custom Input

Y.O.G.I. (AI Bot)

Problem Solved Successfully

Suggest Feedback

Test Cases Passed

1111 / 1111

Attempts : Correct / Total

1 / 1

Accuracy : 100%

Points Scored

4 / 4

Your Total Score: 30

Time Taken

0.05

Solve Next

Sorted subsequence of size 3

Move All Zeroes to End

Queue using stack

```
20     top1 = -1;
21     top2 = size;
22 }
23
24 // Function to push an integer into stack1
25 void push1(int x) {
26     if (top1 < top2 - 1) {
27         arr[++top1] = x;
28     }
29 }
30
31 // Function to push an integer into stack2
32 void push2(int x) {
33     if (top1 < top2 - 1) {
34         arr[--top2] = x;
35     }
36 }
37
38 // Function to remove an element from top of stack1
39 int pop1() {
40     if (top1 >= 0) {
41         return arr[top1--];
42     }
43     return -1;
44 }
45
46 // Function to remove an element from top of stack2
47 int pop2() {
48     if (top2 < size) {
49         return arr[top2++];
50     }
51     return -1;
52 }
53
54 }
```