

Aim

Given 2 stacks, add bottom element of stack1 with top element of stack2.

Algorithm

- Bottom of stack1 = first pushed.
- Top of stack2 = last pushed.
- Print their sum.

C Code

```
#include <stdio.h>

#define SIZE 100

struct Stack{
    int arr[SIZE];
    int top;
};

void init(struct Stack* s){ s->top=-1; }

void push(struct Stack* s,int x){ s->arr[++s->top]=x; }

int pop(struct Stack* s){ return s->arr[s->top--]; }

int main(){
```

```
    struct Stack s1,s2; init(&s1); init(&s2);

    push(&s1,10); push(&s1,20); push(&s1,30);

    push(&s2,5); push(&s2,15); push(&s2,25);


    int bottomS1=s1.arr[0];

    int topS2=s2.arr[s2.top];

    printf("Sum = %d\n",bottomS1+topS2);

    return 0;

}
```

Input

Stack1: 10,20,30
Stack2: 5,15,25

Output

Sum = 35

Result

Bottom of stack1 + top of stack2 computed correctly.