

```
#include <stdio.h>
#include <stdlib.h>

#define MAX_SIZE 100

struct Stack {
    int items[MAX_SIZE];
    int top;
};

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

int isEmpty(struct Stack *s) {
    return s->top == -1;
}

int isFull(struct Stack *s) {
    return s->top == MAX_SIZE - 1;
}

void push(struct Stack *s, int value) {
    if (isFull(s)) {
        printf("Stack Overflow\n");
    } else {
        s->items[++s->top] = value;
    }
}

int pop(struct Stack *s) {
    if (isEmpty(s)) {
        printf("Stack Underflow\n");
        return -1;
    } else {
        return s->items[s->top--];
    }
}
```

```
int main() {  
    struct Stack stack;  
    initializeStack(&stack);  
  
    push(&stack, 10);  
    push(&stack, 20);  
    push(&stack, 30);  
  
    printf("Popped element: %d\n", pop(&stack));  
    printf("Popped element: %d\n", pop(&stack));  
    printf("Popped element: %d\n", pop(&stack));  
  
    return 0;  
}
```