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#include <stdio.h>

#define MAX_SIZE 100

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

void initialize(struct Stack* stack) {
		stack->top = -1;
}

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

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

void push(struct Stack* stack, int value) {
		if (isFull(stack)) {
				printf("Stack overflow! Cannot push %d\n", value);
		} else {
				stack->top++;
				stack->arr[stack->top] = value;
				printf("%d pushed to the stack\n", value);
		}
}

int pop(struct Stack* stack) {
		if (isEmpty(stack)) {
				printf("Stack underflow! Cannot pop from an empty stack\n");
				return -1;
		} else {
				int poppedValue = stack->arr[stack->top];
				stack->top--;
				return poppedValue;
		}
}

int peek(struct Stack* stack) {
		if (isEmpty(stack)) {
```

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                printf("The stack is empty\n");
                return -1;
        } else {
                return stack->arr[stack->top];
        }
}

int main() {
        struct Stack myStack;
        initialize(&myStack);

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

        printf("Top element: %d\n", peek(&myStack));

        printf("Popped element: %d\n", pop(&myStack));
        printf("Popped element: %d\n", pop(&myStack));

        printf("Top element: %d\n", peek(&myStack));

        return 0;
}
```