#include <stdio.h>

#define MAX 5 // Maximum size of stack

int stack[MAX];

int top = -1;

// Function to push elements

void push(int value) {

if (top == MAX - 1) {

printf("Stack Overflow! Cannot push %d\n", value);

} else {

top++;

stack[top] = value;

printf("Pushed %d to stack.\n", value);

}

}

// Function to pop elements

void pop() {

if (top == -1) {

printf("Stack Underflow! Cannot pop from empty stack.\n");

} else {

printf("Popped %d from stack.\n", stack[top]);

top--;

}

}

// Function to display the stack

void display() {

if (top == -1) {

printf("Stack is empty.\n");

} else {

printf("Current stack: ");

for (int i = 0; i <= top; i++) {

printf("%d ", stack[i]);

}

printf("\n");

}

}

int main() {

// Trying to cause stack overflow

push(10);

push(20);

push(30);

push(40);

push(50);

push(60); // Overflow here

display();

// Trying to cause stack underflow

pop();

pop();

pop();

pop();

pop();

pop(); // Underflow here

return 0;

}