#include <stdio.h>

#include <stdlib.h>

#define max 10

void push();

void pop();

void display();

int top=-1, stack[max], item;

int main() {

int ch;

while (1) {

printf("1 Push 2 Pop 3 Display 4 Exit \n");

scanf("%d", &ch);

switch (ch) {

case 1:

push();

break;

case 2:

pop();

break;

case 3:

display();

break;

case 4:

exit(0);

default:

printf("Invalid choice! Please enter 1, 2, 3, or 4.\n");

}

}

}

void push() {

if (top == max - 1) {

printf("Stack overflow\n");

return;

}

printf("Enter the element to be pushed: ");

scanf("%d", &item);

top++;

stack[top] = item;

}

void pop() {

if (top == -1) {

printf("Stack underflow\n");

return;

}

printf("Popped element: %d\n", stack[top]);

top--;

}

void display() {

if (top == -1) {

printf("Stack is empty\n");

return;

}

printf("The elements of stack are: ");

for (int i = top; i >= 0; i--) {

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

}

printf("\n");

}

