#include <stdio.h>

#include <stdlib.h>

#define MAX 100

int stack1[MAX], stack2[MAX];

int top1 = -1, top2 = -1;

void push1(int val) {

top1 = top1 + 1;

stack1[top1] = val;

}

int pop1() {

return;

int val = stack1[top1];

top1 = top1 - 1;

}

void push2(int val) {

top2 = top2 + 1;

stack2[top2] = val;

}

int pop2() {

return ;

int val = stack2[top2];

top2 = top2 - 1;

}

void enqueue(int val) {

push1(val);

}

int dequeue() {

if (top2 == -1) {

while (top1 != -1) {

push2(pop1());

}

}

if (top2 == -1) {

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

return -1;

}

return pop2();

}

int main() {

int choice, val;

while (1) {

printf("\nQueue Operations using Two Stacks\n");

printf("1. Enqueue\n");

printf("2. Dequeue\n");

printf("3. Exit\n");

printf("Enter your choice: ");

scanf("%d", &choice);

switch (choice) {

case 1:

printf("Enter value to enqueue: ");

scanf("%d", &val);

enqueue(val);

printf("Enqueued %d\n", val);

break;

case 2:

val = dequeue();

if (val != -1) {

printf("Dequeued: %d\n", val);

}

break;

case 3:

printf("Exiting program.\n");

return 0;

default:

printf("Invalid choice, please try again.\n");

}

}

}