#include <stdio.h>

#define MAX\_SEATS 20

int seats[MAX\_SEATS] = {0};

void reserveSeat(int seatNumber) {

if (seatNumber >= 1 && seatNumber <= MAX\_SEATS) {

if (seats[seatNumber - 1] == 0) {

seats[seatNumber - 1] = 1;

printf("Seat %d is reserverd.\n", seatNumber);

} else {

printf("Seat %d is already reserved.\n", seatNumber);

}

} else {

printf("Invalid seat number.\n");

}

}

void cancelReservation(int seatNumber) {

if (seatNumber >= 1 && seatNumber <= MAX\_SEATS) {

if (seats[seatNumber - 1] == 1) {

seats[seatNumber - 1] = 0;

printf("Reservation for seat %d is canceled.\n", seatNumber);

} else {

printf("Seat %d is not reserved.\n", seatNumber);

}

} else {

printf("Invalid seat number.\n");

}

}

void checkAvailability() {

int availableSeats = 0;

for (int i = 0; i < MAX\_SEATS; i++) {

if (seats[i] == 0) {

availableSeats++;

}

}

printf("Number of available seats: %d\n", availableSeats);

}

int main() {

int choice, seatNumber;

do {

printf("\nBus Seat Reservation System\n");

printf("1. Reserve a seat\n");

printf("2. Cancel reservation\n");

printf("3. Check seat availability\n");

printf("4. Exit\n");

printf("Enter your choice: ");

scanf("%d", &choice);

switch (choice) {

case 1:

printf("Enter seat number: ");

scanf("%d", &seatNumber);

reserveSeat(seatNumber);

break;

case 2:

printf("Enter seat number: ");

scanf("%d", &seatNumber);

cancelReservation(seatNumber);

break;

case 3:

checkAvailability();

break;

case 4:

printf("Exiting...\n");

break;

default:

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

}

} while (choice != 4);

return 0;

}