#include <stdio.h>

#include <stdlib.h>

#define MaximumSeats 60

int seats[MaximumSeats] = {0};

void reserve\_seat(int seat\_num) {

if (seat\_num >= 1 && seat\_num <= MaximumSeats) {

if (seats[seat\_num - 1] == 0) {

seats[seat\_num - 1] = 1;

printf("Seat %d has been reserved for you.\n", seat\_num);

} else {

printf("Sorry, Seat %d is already occupied.\n", seat\_num);

}

} else {

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

}

}

void DisplaySeats() {

printf("Current Seat Status:\n");

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

printf("Seat %d: %s\n", i + 1, (seats[i] == 0) ? "Available" : "Reserved");

}

}

int main() {

int choice, seat\_num;

while (1) {

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

printf("1. Reserve Seat\n");

printf("2. Display Seat Status\n");

printf("3. Exit\n");

printf("Enter the seat number of your choice: ");

scanf("%d", &choice);

switch (choice) {

case 1:

printf("Enter the seat number of your choice: ");

scanf("%d", &seat\_num);

reserve\_seat(seat\_num);

break;

case 2:

DisplaySeats();

break;

case 3:

printf("Exiting the program. Thank you!\n");

exit(0);

default:

printf("Invalid choice.\n");

break;

}

}

return 0;

}