MOVIE TICKET RESERVATION CODE:

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

// Maximum number of movies and seats

#define MAX\_MOVIES 5

#define MAX\_SEATS 10

// Structure to represent a movie

struct Movie {

char title[50];

int availableSeats;

};

// Function prototypes

void displayMenu();

void displayMovies(struct Movie movies[], int numMovies);

void bookTicket(struct Movie movies[], int movieIndex, int numTickets);

int main() {

// Array to store information about movies

struct Movie movies[MAX\_MOVIES] = {

{"Movie 1", MAX\_SEATS},

{"Movie 2", MAX\_SEATS},

{"Movie 3", MAX\_SEATS},

{"Movie 4", MAX\_SEATS},

{"Movie 5", MAX\_SEATS}

};

int choice;

do {

displayMenu();

printf("Enter your choice: ");

scanf("%d", &choice);

switch (choice) {

case 1:

displayMovies(movies, MAX\_MOVIES);

break;

case 2:

{

int movieIndex, numTickets;

printf("Enter the movie index (1-%d): ", MAX\_MOVIES);

scanf("%d", &movieIndex);

if (movieIndex < 1 || movieIndex > MAX\_MOVIES) {

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

break;

}

printf("Enter the number of tickets: ");

scanf("%d", &numTickets);

if (numTickets < 1 || numTickets > movies[movieIndex - 1].availableSeats) {

printf("Invalid number of tickets. Please try again.\n");

break;

}

bookTicket(movies, movieIndex - 1, numTickets);

}

break;

case 3:

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

break;

default:

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

}

} while (choice != 3);

return 0;

}

void displayMenu() {

printf("\n\*\*\*\*\* Movie Ticket Booking System \*\*\*\*\*\n");

printf("1. Display Available Movies\n");

printf("2. Book Tickets\n");

printf("3. Exit\n");

}

void displayMovies(struct Movie movies[], int numMovies) {

printf("\nAvailable Movies:\n");

printf("----------------------------\n");

printf("Index\tTitle\t\tAvailable Seats\n");

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

printf("%d\t%s\t\t%d\n", i + 1, movies[i].title, movies[i].availableSeats);

}

}

void bookTicket(struct Movie movies[], int movieIndex, int numTickets) {

printf("\nBooking tickets for %s...\n", movies[movieIndex].title);

if (movies[movieIndex].availableSeats >= numTickets) {

printf("Tickets booked successfully!\n");

// Update available seats

movies[movieIndex].availableSeats -= numTickets;

} else {

printf("Sorry, not enough seats available. Please choose a different movie or reduce the number of tickets.\n");

}

}