

```
#include <stdio.h>
#include <string.h>

// Maximum number of tourists and tours
#define MAX_TOURISTS 100
#define MAX TOURS 10

// Structure to store tourist details
typedef struct {
    int id;
    char name[100];
    int age;
    char contact[20];
    char address[200];
} Tourist;

// Structure to store tour details
typedef struct {
    int tour_id;
    char destination[100];
    float cost;
    int duration; // Duration in days
} Tour;
```

```
// Structure to store booking information
typedef struct {
    int tourist_id;
    int tour_id;
} Booking;

// Global arrays to store tourists, tours, and bookings
Tourist tourists[MAX_TOURISTS];
Tour tours[MAX_TOURS];
Booking bookings[MAX_TOURISTS];
int tourist_count = 0;
int tour_count = 0;
int booking_count = 0;

// Function prototypes
void register_tourist();
void view_tourists();
void add_tour();
void view_tours();
void book_tour();
void view_bookings();
```

```
int main() {
    int choice;
    while (1) {
        printf("\nTourist Management System\n");
        printf("1. Register Tourist\n");
        printf("2. View Tourists\n");
        printf("3. Add Tour\n");
        printf("4. View Tours\n");
        printf("5. Book Tour\n");
        printf("6. View Bookings\n");
        printf("7. Exit\n");
        printf("Enter your choice: ");
        scanf("%d", &choice);

        switch (choice) {
            case 1:
                register_tourist();
                break;
            case 2:
                view_tourists();
                break;
            case 3:
```

```
case 1:
    register_tourist();
    break;
case 2:
    view_tourists();
    break;
case 3:
    add_tour();
    break;
case 4:
    view_tours();
    break;
case 5:
    book_tour();
    break;
case 6:
    view_bookings();
    break;
case 7:
    printf("Exiting the system...\n");
    return 0;
default:
```

```

        default:
            printf("Invalid choice! Please try again.\n");
        }
    }
}

// Function to register a tourist
void register_tourist() {
    if (tourist_count >= MAX_TOURISTS) {
        printf("Cannot register more tourists. Max limit reached\n");
        return;
    }
    Tourist new_tourist;
    new_tourist.id = tourist_count + 1;
    printf("Enter name: ");
    scanf("%s", new_tourist.name);
    printf("Enter age: ");
    scanf("%d", &new_tourist.age);
    printf("Enter contact: ");
    scanf("%s", new_tourist.contact);
    printf("Enter address: ");

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tourists[tourist_count] = new_tourist;
tourist_count++;
printf("Tourist registered successfully!\n");
```

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}
```

```
// Function to view all registered tourists
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void view_tourists() {
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    if (tourist_count == 0) {
        printf("No tourists registered.\n");
        return;
    }
```

```
    for (int i = 0; i < tourist_count; i++) {
        printf("ID: %d, Name: %s, Age: %d, Contact: %s, Address: %s\n",
            tourists[i].id, tourists[i].name, tourists[i].age,
            tourists[i].contact, tourists[i].address);
    }
```

```
}
```

```
// Function to add a new tour
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```
void add_tour() {
```

```
    if (tour_count >= MAX TOURS) {
        printf("Cannot add more |tours. Max limit reached.\n");
```

```

Tour new_tour;
new_tour.tour_id = tour_count + 1;
printf("Enter tour destination: ");
scanf(" %[^\n]", new_tour.destination);
printf("Enter cost of tour: ");
scanf("%f", &new_tour.cost);
printf("Enter duration of tour (in days): ");
scanf("%d", &new_tour.duration);

tours[tour_count] = new_tour;
tour_count++;
printf("Tour added successfully!\n");
}

// Function to view all tours
void view_tours() {
    if (tour_count == 0) {
        printf("No tours available.\n");
        return;
    }
    for (int i = 0; i < tour_count; i++) {
        printf("Tour ID: %d, Destination: %s, Cost: %.2f,
            %d days\n", tours[i].tour_id, tours[i].destination,
            tours[i].cost, tours[i].duration);
    }
}

```

```

    }
}

// Function to book a tour
void book_tour() {
    int tourist_id, tour_id;
    printf("Enter Tourist ID: ");
    scanf("%d", &tourist_id);
    if (tourist_id <= 0 || tourist_id > tourist_count) {
        printf("Invalid tourist ID.\n");
        return;
    }
    printf("Enter Tour ID to book: ");
    scanf("%d", &tour_id);
    if (tour_id <= 0 || tour_id > tour_count) {
        printf("Invalid tour ID.\n");
        return;
    }
}

```

```

Booking new_booking = {tourist_id, tour_id};
bookings[booking_count] = new_booking;
booking_count++;
printf("Tour booked successfully!\n");

```



```
Booking new_booking = {tourist_id, tour_id};  
bookings[booking_count] = new_booking;  
booking_count++;  
printf("Tour booked successfully!\n");
```

```
}
```

```
// Function to view all bookings
```

```
void view_bookings() {  
    if (booking_count == 0) {  
        printf("No bookings available.\n");  
        return;  
    }  
    for (int i = 0; i < booking_count; i++) {  
        printf("Tourist ID: %d, Tour ID: %d\n", bookings[i]  
            .tourist_id, bookings[i].tour_id);  
    }  
}
```

```
}
```