

## DAY 4

### 1. Airline

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

```
#include <stdlib.h>
```

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

```
#define MAX_SEATS 50
```

```
#define MAX_NAME_LENGTH 50
```

```
typedef struct {
```

```
    int seat_number;
```

```
    char passenger_name[MAX_NAME_LENGTH];
```

```
} Booking;
```

```
void displayMenu() {
```

```
    printf("\n1. Book a seat\n");
```

```
    printf("2. Cancel booking\n");
```

```
    printf("3. Display flight information\n");
```

```
    printf("4. Exit\n");
```

```
    printf("Enter your choice: ");
```

```
}
```

```
void bookSeat(Booking bookings[], int *num_bookings) {
```

```
    if (*num_bookings >= MAX_SEATS) {
```

```
        printf("Sorry, all seats are booked.\n");
```

```
        return;
```

```
}
```

```
Booking new_booking;
```

```
printf("Enter passenger name: ");
```

```
scanf("%s", new_booking.passenger_name);
```

```

    new_booking.seat_number = (*num_bookings) + 1;
    bookings[*num_bookings] = new_booking;
    (*num_bookings)++;

    printf("Seat booked successfully. Your seat number is %d.\n", new_booking.seat_number);
}

```

```

void cancelBooking(Booking bookings[], int *num_bookings) {
    int seat_number;

    printf("Enter seat number to cancel booking: ");
    scanf("%d", &seat_number);

    if (seat_number < 1 || seat_number > *num_bookings) {
        printf("Invalid seat number.\n");
        return;
    }
}

```

```

    printf("Booking for seat %d (Passenger: %s) cancelled.\n", bookings[seat_number -
1].seat_number, bookings[seat_number - 1].passenger_name);

```

```

    // Shift remaining bookings to fill the cancelled seat
    for (int i = seat_number - 1; i < *num_bookings - 1; i++) {
        bookings[i] = bookings[i + 1];
    }

    (*num_bookings)--;
}

```

```

void displayFlightInfo(Booking bookings[], int num_bookings) {
    printf("\nFlight Information:\n");
    printf("Total Seats: %d\n", MAX_SEATS);
    printf("Available Seats: %d\n", MAX_SEATS - num_bookings);
    printf("Booked Seats:\n");
}

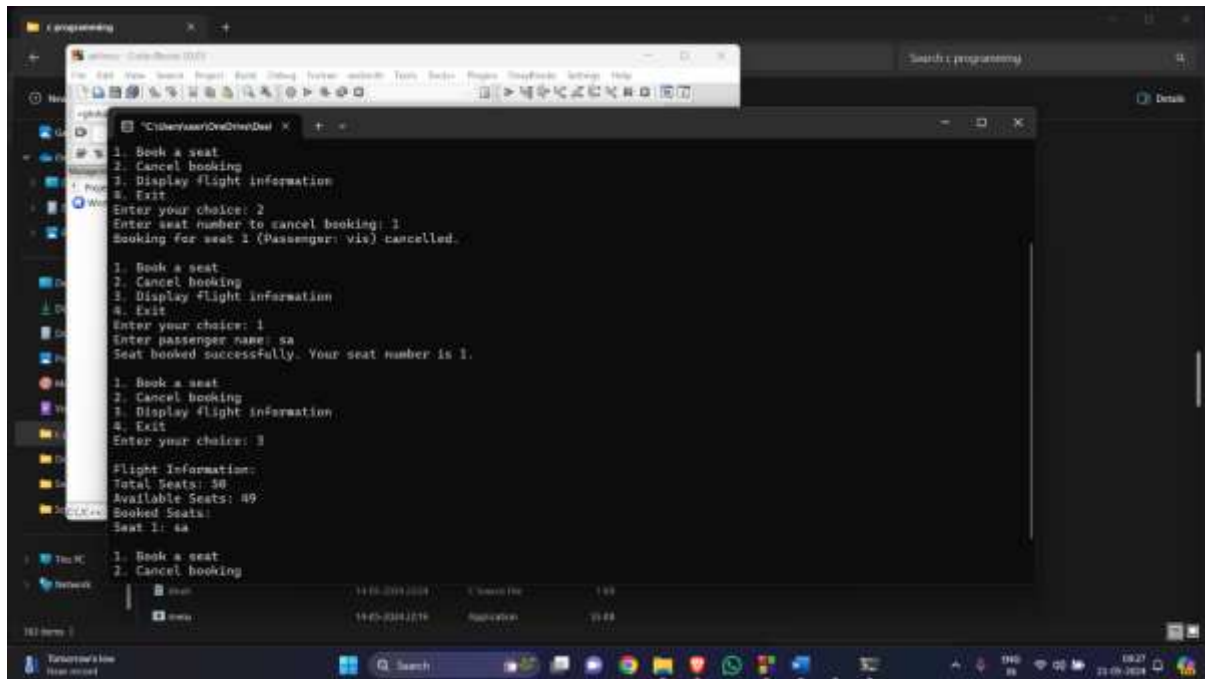
```

```
    for (int i = 0; i < num_bookings; i++) {  
        printf("Seat %d: %s\n", bookings[i].seat_number, bookings[i].passenger_name);  
    }  
}
```

```
int main() {  
    Booking bookings[MAX_SEATS];  
    int num_bookings = 0;  
    int choice;  
  
    while (1) {  
        displayMenu();  
        scanf("%d", &choice);  
  
        switch (choice) {  
            case 1:  
                bookSeat(bookings, &num_bookings);  
                break;  
            case 2:  
                cancelBooking(bookings, &num_bookings);  
                break;  
            case 3:  
                displayFlightInfo(bookings, num_bookings);  
                break;  
            case 4:  
                printf("Exiting program.\n");  
                return 0;  
            default:  
                printf("Invalid choice. Please try again.\n");  
        }  
    }  
}
```

```
return 0;}
```

OUTPUT:



## 2. Emp details

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

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

```
void create();
```

```
void view();
```

```
void edit();
```

```
void delete();
```

```
void choice();
```

```
void choice(){  
    int choice;  
    start:  
    printf("\nWELCOME TO OMG COMPANY\n");  
    printf("-----\n");  
    printf("Press 1 to Create a new Data\n");  
    printf("Press 2 to View the Data\n");  
    printf("Press 3 to edit the Data\n");  
    printf("Press 4 to delete the Data\n");  
    printf("Press 5 to exit the Program...!\n");  
    printf("-----\n");
```

```
    int choice;  
    scanf("%d",&choice);
```

```
    if(choice==5){  
        printf("Exiting the Program...\n");  
        return ;  
    }
```

```
    switch (choice)
```

```

{
case 1:
    create();
    printf("Do you wish to continue? 1 for Yes 0 for No\n");
    scanf("%d",&choic);

    if(choic==1){
        system("cls");
        goto start;
    }
    else if(choic==0){
        printf(" exiting the program.....!\n");
    }
    break;
case 2:
    view();
    printf("Do you wish to continue? 1 for Yes 0 for No\n");
    scanf("%d",&choic);

    if(choic==1){
        system("cls");
        goto start;
    }
    else if(choic==0){
        printf(" exiting the program.....!\n");
    }
    break;
case 3:
    edit();
    printf("Do you wish to continue? 1 for Yes 0 for No\n");
    scanf("%d",&choic);

    if(choic==1){
        system("cls");
        goto start;
    }
    else if(choic==0){
        printf(" exiting the program.....!\n");
    }
    break;
case 4:
    delete();
    printf("Do you wish to continue? 1 for Yes 0 for No\n");
    scanf("%d",&choic);

    if(choic==1){
        system("cls");
        goto start;
    }
    else if(choic==0){
        printf(" exiting the program.....!\n");
    }
}

```

```

        }
        break;
    default:
        break;
    }
}
struct emp
{
    int id;
    char name[30];
    int age;
    char branch[20];
    char designation[20];
};

void create() {
    struct emp p1;
    printf("Enter Employee Id:\n");
    scanf("%d",&p1.id);

    printf("Enter Employee name: \n");
    scanf("%s", p1.name);
    strcpy (p1.name, p1.name);

    printf("Enter Employee Age: \n");
    scanf("%d", &p1.age);

    printf("Enter Employee Branch:\n");
    scanf("%s", p1.branch);

    printf("Enter Employee Designation:\n");
    scanf("%s", p1.designation);

    FILE *fp=fopen("c:\\Downloads\\task.txt", "a");
    if(fp==NULL){
        printf("Error opening File\n");
        return ;
    }
    fprintf(fp,"Employee Id:%d\n Employee Name:%s\n Employee Age: %d \n Employee
Branch:%s\n Employee Designation :%s\n\n",p1.id,p1.name,p1.age,p1.branch,p1.designation);
    printf("Data Uploaded Successfully\n");
    fclose(fp);
}

void view() {
    FILE *ptr;
    ptr=fopen("c:\\Downloads\\task.txt", "r");
    if(ptr==NULL){
        printf("Failed to open File\n");
        return;
    }
}

```

```

    char a[100];
    while(fscanf(ptr," %[^\\n]",a)!=EOF){
        printf("%s\\n",a);
    }
    fclose(ptr);
}

void edit(){
    FILE *ptr;
    ptr=fopen("c:\\Downloads\\task.txt", "r+");
    printf("Enter the Employee Id to Modify the Data:\\n");
    char a;
    scanf("%c",a);

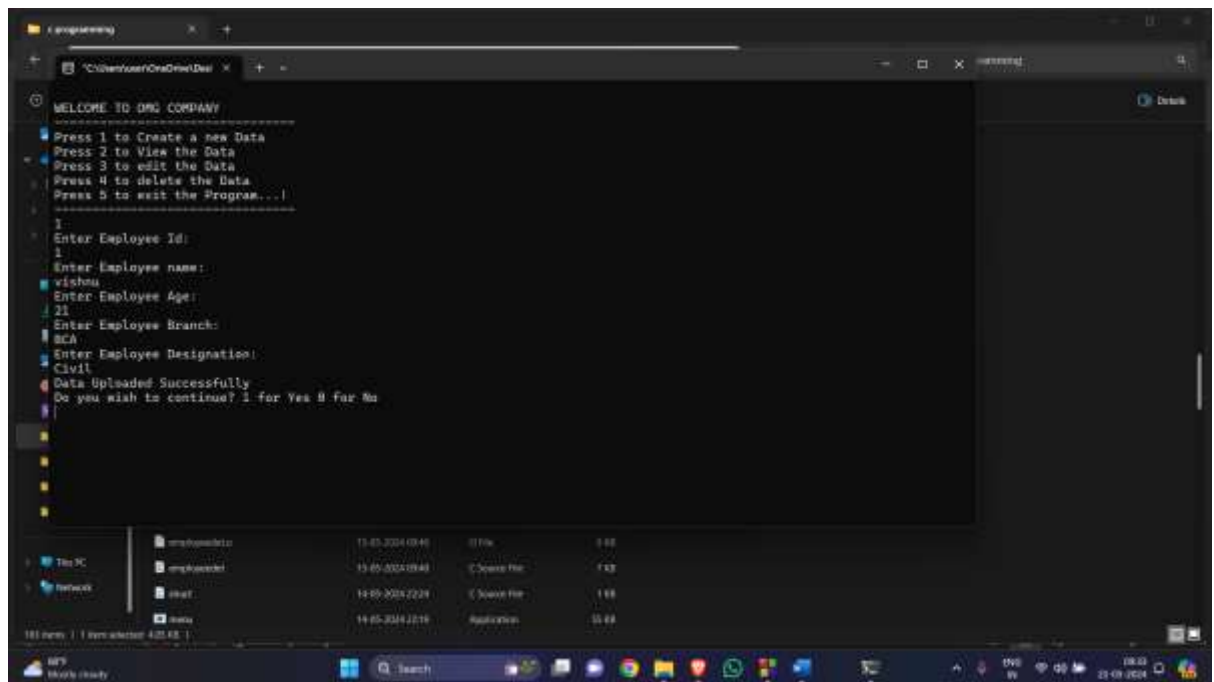
    char b[100];
    char ch;
    while(1){
        ch=fgetc(ptr);
        // printf("%c", ch);
        if(ch==a){
            fseek(ptr, -1, SEEK_CUR);
            fputc('2',ptr);
            fseek(ptr, 0, SEEK_CUR);
        }
        if(ch==EOF){
            printf("End of the file\\n");
            return;
        }
    }
    fclose(ptr);
}

void delete(){
    FILE *ptr;
    ptr=fopen("c:\\Downloads\\task.txt", "r+");
    printf("Enter the Name of Employee to delete:\\n");
    char a[100];
    scanf("%s",a);
    char b[100];
    while(fscanf(ptr,"%s",b)!=EOF){
        if(strcmp(a,b)==0){
            printf("hello");
        }
    }
}

int main()
{
    choice();
    return 0;
}

```

Output:



```
WELCOME TO ORG COMPANY
Press 1 to Create a new Data
Press 2 to View the Data
Press 3 to edit the Data
Press 4 to delete the Data
Press 5 to exit the Program...!

1
Enter Employee Id:
1
Enter Employee name:
vishnu
Enter Employee Age:
21
Enter Employee Branch:
SCA
Enter Employee Designation:
Civil
Data Uploaded Successfully
Do you wish to continue? 1 for Yes 0 for No
```

### 3. Calendar

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

```
int dayOfWeek(int d, int m, int y) {
    static int t[] = {0, 3, 2, 5, 0, 3, 5, 1, 4, 6, 2, 4};
    y -= m < 3;
    return (y + y/4 - y/100 + y/400 + t[m-1] + d) % 7;
}
```

```
void printCalendar(int month, int year) {
    int daysInMonth, i, currentDay;

    int days[] = {31, 28, 31, 30, 31, 30, 31, 31, 30, 31, 30, 31};

    if ((year % 4 == 0 && year % 100 != 0) || (year % 400 == 0))
        days[1] = 29;
```



```

printf(" ***** Calendar - %d/%d *****\n", month, year);
printf(" Sun Mon Tue Wed Thu Fri Sat\n");

currentDay = dayOfWeek(1, month, year);

for (i = 0; i < currentDay; i++)
    printf("    ");

for (i = 1; i <= days[month-1]; i++) {
    printf("%5d", i);
    if (++currentDay > 6) {
        currentDay = 0;
        printf("\n");
    }
}

if (currentDay != 0)
    printf("\n");
}

int main() {
    int month, year;

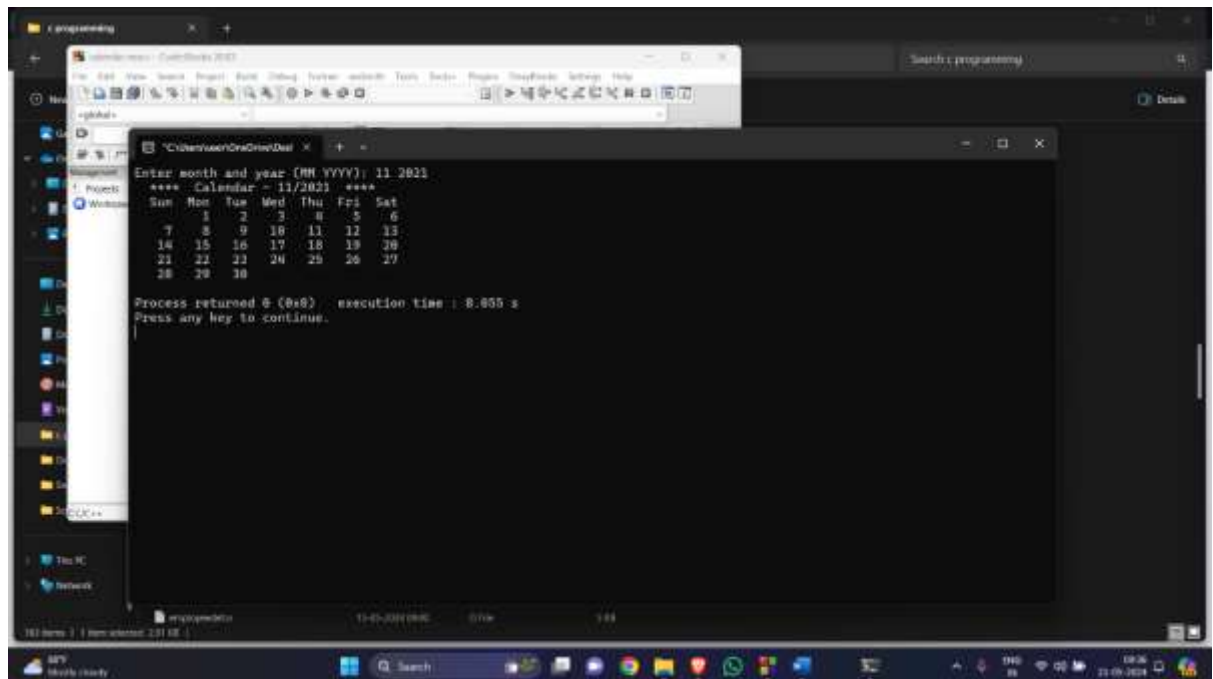
    printf("Enter month and year (MM YYYY): ");
    scanf("%d %d", &month, &year);

    printCalendar(month, year);

    return 0;
}

```

OUTPUT:



4. Available flight

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

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

```
void details()
```

```
{
```

```
FILE *file=fopen("c:\\Downloads\\det.txt","r");
```

```
if (file==NULL)
```

```
{
```

```
printf("error...");
```

```
return;
```

```
}
```

```
int a;
```

```
for(a=getc(file);a!=EOF;a=getc(file))
```

```
{
```

```
printf("%c",a);
```

```
fflush(stdout);
```

```
}
```

```
fclose(file);
```

```

}

void main()
{
    int a;

    printf("enter the date :");

    scanf("%d",&a);

    details();

}

```

OUTPUT:

```

C:\Users\user\OneDrive\Desktop
enter the date :12
DATE      DESTINATION  AVAILABLE FLIGHT
12-12-2024 KOCHI--PUNE   INDIGO
12-12-2024 PUNE--KOCHI  INDIGO
Process returned 0 (0x0)   execution time : 3.568 s
Press any key to continue.

```