PES UNIVERSITY
(Established under Karnataka Act No. 16 of 2013)
100 Ft. Road, BSK III Stage, Bengaluru – 560 085

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Course Title: Problem Solving with C Laboratory		
Course code: UE19CS152		
Semester : II sem	Section: D	Team Id:
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PROJECT REPORT

AIRPORT CONNECT

Problem Statement:

　　To create a program to check the availability of flights (both domestic and international) and to create a booking portal to facilitate payment.

Description:

　　This program is developed to facilitate the checking of availability of flights and to enter the destination and choose a flight. This program is developed to act as an instant boarding portal, and it considers flights that leave within the next three hours for domestic and six hours for international. A booking portal is created. Three ALGL user ids are pre-specified along with their respective ALGL pins.

C-concepts used:

　　The concepts used in this program are:

- Text files:
    　　[CSV files] {comma separated variables files}

These are the delimited text files that use a comma to separate values. Each line is a data record.

- strtok()

  This is a function used to split a string of tokens based on a particular delimiter where a token is a substring extracted from the original string.
  Syntax: strtok(string,"delimiter");

- memset()

  This function is used to initialize values to a multi-dimensional array.
  Syntax: memset(arrayname, value, sizeof(arr[0][0])*R*C)
  (where R: number of rows; C: Number of columns)

- Structures

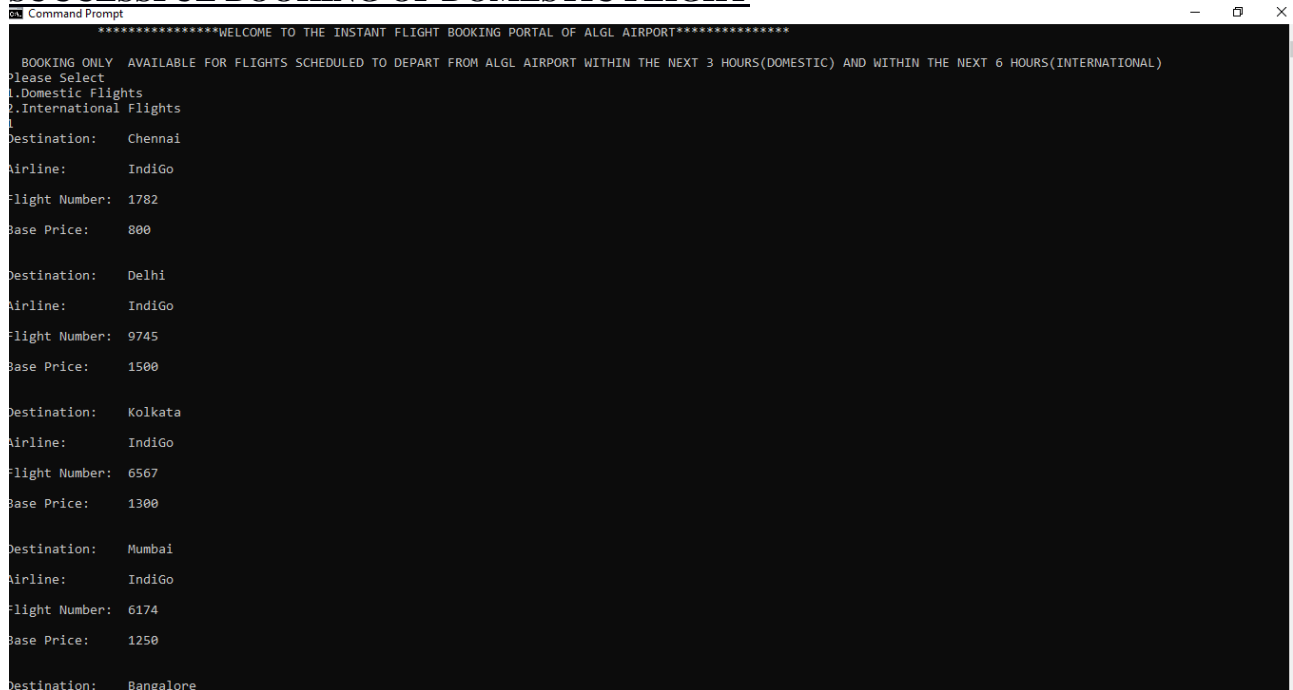 This is a user defined datatype which can be used to group items of different datatypes.
  Syntax: struct name_of_structure;
                {
                }; s;   (where s: Object declaration)

Learning Outcome:

- Learnt about the way data is stored in a text file.
- Learnt about strtok().
- Learnt about another way of initializing multi-dimensional arrays.
- Learnt the basics of file handling.
- Learnt about CSV file.

Output Screenshots:

SUCCESSFUL BOOKING OF DOMESTIC FLIGHT

```
Command Prompt                                                                    —  □  ✕

Destination:    Bangalore

Airline:        AirIndia

Flight Number:  8349

Base Price:     950


Destination:    Chandighar

Airline:        AirIndia

Flight Number:  1938

Base Price:     1570


Destination:    Calicut

Airline:        AirIndia

Flight Number:  9581

Base Price:     1300


Enter Name of the selected Destination
Mumbai
The selected Flight details are

Destination:    Mumbai
Airline:        IndiGo
Flight Number:  6174
Base Price:     1250

Enter the number of tickets you'd like to book
2
You have these options for seats
1.Economy (Base Price+Tax)
2.Business (Base Price + 20000+TAX)
3.First (Base Price + 100000+TAX)
2
**** **** ****      WELCOME TO THE PAYMENT PORTAL OF ALGL AIRPORT      **** **** ****
```

```
Command Prompt

2
**** **** ****          WELCOME TO THE PAYMENT PORTAL OF ALGL AIRPORT      **** **** ****

enter your ALGL userid
0
enter your ALGL pin
111
your available balance is  500000
price:26500
payment successful
remaining balance:473500
                ***************** YOUR FLIGHT DETAILS*****************

Price = 26500
Flightnum = 6174
Dest = Mumbai
Airline = IndiGo

                *****************HAVE A SAFE JOURNEY*****************

C:\Users\kavit\Desktop>
```

SUCCESSFUL BOOKING OF AN INTERNATIONAL FLIGHT


```
****************WELCOME TO THE INSTANT FLIGHT BOOKING PORTAL OF ALGL AIRPORT****************

 BOOKING ONLY  AVAILABLE FOR FLIGHTS SCHEDULED TO DEPART FROM ALGL AIRPORT WITHIN THE NEXT 3 HOURS(DOMESTIC) AND WITHIN THE NEXT 6 HOURS(INTERNATIONAL)
Please Select
1.Domestic Flights
2.International Flights
2
Please Select Region
1.Africa
2.Eurasia
3.Australasia
4.South America
5.North America
1
Destination:    Lagos

Airline:        Emirates

Flight Number:  738271

Base Price:     23000


Destination:    Cairo

Airline:        Virgin

Flight Number:  818371

Base Price:     19000


Destination:    Nairobi

Airline:        ThaiAirways

Flight Number:  917573

Base Price:     27000


Destination:    Alexandria

Airline:        Quantas
```



```
Airline:        Quantas

Flight Number:  985820

Base Price:     31000


Destination:    Johannesburg

Airline:        Jetstar

Flight Number:  983475

Base Price:     37000


Destination:    Durban

Airline:        Kingfisher

Flight Number:  879809

Base Price:     35000

Enter Name of the selected Destination
Durban
The selected Flight details are

Destination:    Durban
Airline:        Kingfisher
Flight Number:  879809
Base Price:     35000
Enter the number of tickets you'd like to book
2
You have these options for seats
1.Economy (Base Price+Tax)
2.Business (Base Price + 20000+TAX)
3.First (Base Price + 100000+TAX)
3
**** **** ****      WELCOME TO THE PAYMENT PORTAL OF ALGL AIRPORT       **** **** ****

enter your ALGL userid
1
enter your ALGL pin
```

```
**** **** ****        WELCOME TO THE PAYMENT PORTAL OF ALGL AIRPORT        ****  ****  ****

enter your ALGL userid
1
enter your ALGL pin
222
your available balance is  600000
price:190000
payment successful
remaining balance:410000
                ****************** YOUR FLIGHT DETAILS******************

Price = 190000
Flightnum = 879809
Dest = Durban
Airline = Kingfisher
                ****************HAVE A SAFE JOURNEY*****************

C:\Users\kavit\Desktop>
```

ENTERING INVALID USER ID:

```
               ****************WELCOME TO THE INSTANT FLIGHT BOOKING PORTAL OF ALGL AIRPORT****************

 BOOKING ONLY  AVAILABLE FOR FLIGHTS SCHEDULED TO DEPART FROM ALGL AIRPORT WITHIN THE NEXT 3 HOURS(DOMESTIC) AND WITHIN THE NEXT 6 HOURS(INTERNATIONAL)
Please Select
1.Domestic Flights
2.International Flights
2
Please Select Region
1.Africa
2.Eurasia
3.Australasia
4.South America
5.North America
2
Destination:    Zurich

Airline:        SuisseAir

Flight Number:  198790

Base Price:     52500


Destination:    Munich

Airline:        Lufthansa

Flight Number:  971364

Base Price:     41000


Destination:    London

Airline:        BritishAirways

Flight Number:  98119

Base Price:     54000


Destination:    Ibiza

Airline:        Emirates
```

```
irline:        Emirates

light Number:  988451

ase Price:     57000


estination:    Lisbon

irline:        CathayPacific

light Number:  212486

ase Price:     51000


estination:    Quatar

irline:        Quatar

light Number:  76518

ase Price:     43000


estination:    Beijing

irline:        ShenzenAirways

light Number:  923481

ase Price:     310000


estination:    Dubai

irline:        Emirates

light Number:  285461

ase Price:     30000


estination:    Wuhan
```

```
Destination:    Wuhan

Airline:        HNA

Flight Number:  666666

Base Price:     6666


Destination:    Athens

Airline:        JetBlu

Flight Number:  812581

Base Price:     35000

Enter Name of the selected Destination
Athens
The selected Flight details are

Destination:    Athens
Airline:        JetBlu
Flight Number:  812581
Base Price:     35000
Enter the number of tickets you'd like to book
3
You have these options for seats
1.Economy (Base Price+Tax)
2.Business (Base Price + 20000+TAX)
3.First (Base Price + 100000+TAX)
1
**** **** ****       WELCOME TO THE PAYMENT PORTAL OF ALGL AIRPORT        **** **** ****

enter your ALGL userid
4
invalid user id
 transaction disrupted ,please re -enter the portal

C:\Users\kavit\Desktop>
```

ENTERING INCORRECT PIN

```
****************WELCOME TO THE INSTANT FLIGHT BOOKING PORTAL OF ALGL AIRPORT****************

 BOOKING ONLY  AVAILABLE FOR FLIGHTS SCHEDULED TO DEPART FROM ALGL AIRPORT WITHIN THE NEXT 3 HOURS(DOMESTIC) AND WITHIN THE NEXT 6 HOURS(INTERNATIONAL)
Please Select
1.Domestic Flights
2.International Flights
2
Please Select Region
1.Africa
2.Eurasia
3.Australasia
4.South America
5.North America
3
Destination:    Melbourne

Airline:        Virgin

Flight Number:  562728

Base Price:     49000


Destination:    Sydney

Airline:        Express

Flight Number:  647363

Base Price:     51000


Destination:    Wellington

Airline:        NewZealandAir

Flight Number:  374873

Base Price:     57000


Destination:    Jakarta

Airline:        ThaiAirways
```

```
Flight Number:  693871

Base Price:     21000


Destination:    Hanoi

Airline:        HNA

Flight Number:  927930

Base Price:     25000


Destination:    Bangkok

Airline:        Garuda

Flight Number:  018101

Base Price:     19000


Destination:    Singapore

Airline:        SingaporeAirlines

Flight Number:  091764

Base Price:     17000

Enter Name of the selected Destination
Jakarta
The selected Flight details are

Destination:    Jakarta
Airline:        ThaiAirways
Flight Number:  693871
Base Price:     21000

Enter the number of tickets you'd like to book
4
You have these options for seats
1.Economy (Base Price+Tax)
```

```
**** **** ****        WELCOME TO THE PAYMENT PORTAL OF ALGL AIRPORT      ****  ****  ****

enter your ALGL userid
0
enter your ALGL pin
222
incorrect pin
```

BOOKING WHEN THERE IS INSUFFICIENT BALANCE

```
*****************WELCOME TO THE INSTANT FLIGHT BOOKING PORTAL OF ALGL AIRPORT***************

 BOOKING ONLY  AVAILABLE FOR FLIGHTS SCHEDULED TO DEPART FROM ALGL AIRPORT WITHIN THE NEXT 3 HOURS(DOMESTIC) AND WITHIN THE NEXT 6 HOURS(INTERNATIONAL)
Please Select
.Domestic Flights
.International Flights

Please Select Region
.Africa
.Eurasia
.Australasia
.South America
.North America

Destination:    RioDeJanerio

Airline:        Emirates

Flight Number:  35677

Base Price:     51000


Destination:    Bogota

Airline:        LATAMBrazil

Flight Number:  976324

Base Price:     37000


Destination:    Lima

Airline:        Avianca

Flight Number:  87474

Base Price:     41000


Destination:    MexicoCity

Airline:        Viva
```

```
Airline:        Viva

Flight Number:  767534

Base Price:     43000


Destination:    SaoPaulo

Airline:        Azul

Flight Number:  675637

Base Price:     47000


Destination:    BuenosAeries

Airline:        LATAM Brazil

Flight Number:  286571

Base Price:     51000

Enter Name of the selected Destination
Lima
The selected Flight details are

Destination:    Lima
Airline:        Avianca
Flight Number:  87474
Base Price:     41000

Enter the number of tickets you'd like to book
5
You have these options for seats
1.Economy (Base Price+Tax)
2.Business (Base Price + 20000+TAX)
3.First (Base Price + 100000+TAX)
3
**** **** ****        WELCOME TO THE PAYMENT PORTAL OF ALGL AIRPORT      ****  ****  ****

enter your ALGL userid
2
```

```
**** **** ****           WELCOME TO THE PAYMENT PORTAL OF ALGL AIRPORT        ****   ****   ****

enter your ALGL userid
2
enter your ALGL pin
333
your available balance is   200
insufficient balance
 transaction disrupted,please re-enter the portal
```

Name and Signature of the Faculty: