SQL CODE

<u>Creating Database</u>

DROP DATABASE IF EXISTS Skyfall

GO

CREATE DATABASE Skyfall

GO

<u>Creating Tables</u>

USE Skyfall

GO


```
CREATE TABLE Seat
(
        Seat_Code varchar(10)  PRIMARY KEY,
        Seat_Placement          int
);


CREATE TABLE Baggage
(
        Baggage_Code varchar(10) PRIMARY KEY,
        Weight decimal
);


CREATE TABLE Destinations
(
        Destination_ID varchar(3) PRIMARY KEY,
        Destination_Name varchar(30)
);
```

```sql
CREATE TABLE Flight
(
        Flight_Code varchar(30) PRIMARY KEY,

        Destination_ID varchar(3) FOREIGN KEY REFERENCES Destinations(Destination_ID),

        Departure_Time datetime,

        Arrival_Time datetime,

        Total_Baggage_Weight decimal,

        Seats_Available int
);


CREATE TABLE Passengers
(
        Passenger_Code          varchar(15)      PRIMARY KEY,

        Baggage_Code  varchar(10)      FOREIGN KEY REFERENCES Baggage(Baggage_Code),

        Seat_Code       varchar(10)      FOREIGN KEY REFERENCES Seat(Seat_Code),

        First_Name      varchar(30),

        Last_Name       varchar(30),

        Contact_Email  varchar(30)
);


CREATE TABLE Passengers_on_flight
(
        Passenger_Code          varchar(15) NOT NULL,

        Flight_Code      varchar(30) NOT NULL,

        CONSTRAINT PK_Passengers_On_Flight PRIMARY KEY (Passenger_Code, Flight_Code),

        FOREIGN KEY (Passenger_Code) REFERENCES Passengers(Passenger_Code),

        FOREIGN KEY (Flight_Code) REFERENCES Flight(Flight_Code)
);
```

Populating Destinations with data

```sql
USE Skyfall
GO
INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('JHB','OR Thambo')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('CPT','Cape Town')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('RAA','Rand Airport')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('GCA','Grand Central Airport')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('WNA','Wonderboom National Airport')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('GAA','Greytown Airport')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('VAA','Vereeniging Airport')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('PAA','Potchefstroom Airport')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('KAA','Krugersdorp Aerodrome')
```

```sql
INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('BAA','Brakpan Airfield')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('WAA','Witbank Airport')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('NMA','Newcastle Municipal Airport')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('BBA','Bethlehem Airport')


INSERT INTO Destinations (Destination_ID, Destination_Name)
VALUES ('RRA','Rustenburg Airfield')
```

SQL Queries used in program

Add Flight

```
$"INSERT INTO Flight VALUES('{lblFlightOut.Text}', '{cbxDestination.Text}',
'{dateDeparture.Value}', '{dateArrival.Value}',
'{Double.Parse(txtTotalBaggage.Text)}', '{Double.Parse(txtSeatsAvail.Text)}')";
```

Add Passenger, baggage and seat

```
$"INSERT INTO Baggage VALUES(
'{baggageCode}','{Double.Parse(txtBaggageWeight.Text)}')";
```

```
$"INSERT INTO Seat VALUES ('{seatCode}', '{seatNum}')";
```

```
$"INSERT INTO Passengers
VALUES('{passengerCode}','{baggageCode}','{seatCode}','{txtName.Text}',
'{txtSurname.Text}', '{txtEmail.Text}')";
```

Search Queries used

```
"SELECT * FROM Flight WHERE Flight_Code = '{txtFlightNum.Text}'"
```

```
$"SELECT * FROM Flight WHERE Destination_ID =
'{cbxDestination.SelectedItem.ToString()}' ";
```

```
$"SELECT * FROM Flight WHERE Total_Baggage_Weight = '{numBaggage.Text}' ";
```

```
$"SELECT * FROM Flight WHERE Seats_Available = '{numericUpDown1.Text}' ";
```

```
$"SELECT * FROM Flight WHERE Departure_Time&Date LIKE '{dtpDepart.Format}' ";
```