

Flights of Fancy

#### Objectives:

1. Create Database Triggers
2. Use Lab4.sql to create and populate the tables

#### Requirements:

Create the following SQL Database Triggers:

1. Create a trigger called Lab4Q1 to ensure that the payment amount will not increase by more than 18%. If this happens raise an error and do not allow the update. (3.5 Marks)
2. Create a trigger called Lab4Q2 to ensure that a departure airport code and arrival airport code cannot be the same on a new flight. If this happens, raise an error, and do not allow the insert. (3 Marks)
3. Create a trigger called Lab4Q3 that will enforce a rule that, due to high processing fees, a new payment is not allowed to have an amount less than 100. If an attempt is made to insert a new payment with an amount less than 100, set it to 100. (3.5 marks)
4. Create a trigger called Lab4Q4 to log Bookings that have a high PassengerCount. When the PassengerCount of a booking is updated to over 5, add a record to the HighPassengerCount table. Do not add a record to the HighPassengerCount table if the PassengerCount was already over 5. (3 Marks)

An ERD has been provided for you as well as the relevant table create statements and some sample data in Lab4.sql. You may wish to alter the data in the tables to fully test your triggers.

**Submission Requirements**

Lab Submission will include the following:

* A single script file submitted to Moodle called “Lab4\_LastName\_FirstName.sql” that contains all the trigger code with drop trigger statements at the **top** of the script
  + Use SQL comments to label and separate each trigger **clearly**
  + No test data, random comments or commented out code should be included
* Include in your SQL file a **short** discussion about the lab including:
  + What you liked/disliked about the lab
  + How long it took you to complete the lab
  + How prepared you felt you were for the lab
  + If there are any known errors in your solution, please identify them in your discussion. Errors you have identified and simply could not find a solution for are more acceptable than undocumented errors J.
* Any additional requirements as specified by your instructor.

**Other Considerations**

This is not a group project. Working too closely with another student on lab material will result in a grade of zero (0) for both students. Up to 3 Marks may be deducted for incomplete/incorrect lab submission. Please ask if you are unsure of any lab requirements.

ERD

