

Quiz 5 Student ID: \_\_\_\_\_ Name: \_\_\_\_\_ Score (out of 7): \_\_\_\_\_

Consider the following relations:

**Flights**(fno INT, origin VARCHAR(20), destination VARCHAR(20), distance INT, departure TIME, arrival TIME, aid INT, price REAL)

**Aircrafts**(aid INT, aname VARCHAR(20))

**Certified**(pid INT, aid INT)

**Pilots**(pid INT, pname VARCHAR(20), salary REAL)

A **Certified** record “<X, Y>” means that a pilot with pid “X” is certified to fly an aircraft with aid “Y”.

Write SQL queries for the following questions (1 point each).

1. Find the names of pilots whose salary is less than the price of the cheapest route from Chicago to Miami.

The following questions are based on the table given below.

<u>aid</u>	aname	<u>pid</u>	<u>aid</u>
12	<i>null</i>	2	14
14	Boeing	4	16

Aircrafts                      Certified

2. Write a SQL query to do the **inner join** of **Aircrafts** and **Certified** on their “aid” attributes. Show the results.

Tables copied below from previous page for your convenience.

<u>aid</u>	<u>aname</u>	<u>pid</u>	<u>aid</u>
12	<i>null</i>	2	14
14	Boeing	4	16

Aircrafts                      Certified

3. Write a SQL query to do the **left outer join** of **Aircrafts** and **Certified** on their “aid” attributes. Show the results.
  
4. Write a SQL query to do the **right outer join** of **Aircrafts** and **Certified** on their “aid” attributes. Show the results.
  
5. Write a SQL query to do the **full outer join** of **Aircrafts** and **Certified** on their “aid” attributes. Show the results.
  
6. Write a SQL query to insert a tuple into **Aircrafts** with values aid = 17 and aname = “Airbus”.
  
7. Write a SQL to change the name of aircrafts from “Boeing” to “Airbus”.