

CSc4710 / CSc6710

Fall 2006

Bonus Project

Due Date: Nov 28, 2006 @5:30PM

Flights

fNo number(5)	from varchar2(15)	to varchar2 (15)	distance number(5)	departs date	arrives date
231	Chicago	Los Angeles	2600	10/23/2006 10:50	10/23/2006 1:05
123	Boston	Orlando	3250	10/23/2006 4:00	10/23/2006 8:10
546	Phoenix	New York	3000	10/23/2006 4:30	10/23/2006 5:55
645	Atlanta	San Diego	2000	10/23/2006 12:00	10/23/2006 6:58
224	Los Angeles	Atlanta	2500	10/23/2006 8:00	10/23/2006 3:30
217	Orlando	Los Angeles	3000	10/23/2006 6:00	10/23/2006 9:50

Aircraft

aID number(5)	aName varchar2 (15)	cruisingrange number(5)
747	Boeing	3000
757	Boeing	4100
70	AirJet	3500
767	Boeing	1500
85	AirJet	2200

Certified

eID number(5)	aID number(5)
555	747
555	767
777	70
888	757
555	85

Employees

eID number (5)	eName varchar2 (15)	eSalary number (10)
555	Michael	80000
666	Jennifer	55000
777	John	60000
888	Emily	60500
999	William	110000

The following problems need to be completed in your Oracle account on Yamacraw server.

Problem 1 (20 points)

Develop a JDBC program to create the above four tables and populate them with the given data.

Problem 2 (80 points)

Answer the following queries in SQL.

1. Find the eids of pilots certified for some Boeing aircraft.
2. Find the names of pilots certified for some Boeing aircraft.
3. Find the aids of all aircraft that can be used on non-stop flights from Atlanta to San Diego.
4. Identify the flights that can be piloted by every pilot whose salary is more than \$100,000.
5. Find the names of pilots who can operate plans with a range greater than 3,000 miles but are not certified on any Boeing aircraft.
6. Find the eids of employees who make the highest salary.
7. Find the eids of employees who make the second highest salary.
8. Find the eids of employees who are certified for the largest number of aircraft.
9. Find the eids of employees who are certified for exactly three aircraft.
10. For the total amount paid to employees as salaries.

Instructions of submitting your soft copy:

1. Create a folder named **bonus + (your last name)**. For example, my last name is *Zhang*, the folder should be named as *bonusZhang*.
2. Put the SQL script called *bonus.sql* containing all the SQL queries into the folder.
3. Name the JDBC file as *FlightApp*.
4. Put all the java source and compiled class into the folder.
5. Zip the folder and email it to Jun Zhang: jzhang13@student.gsu.edu.