CST 2520 SQL/ORACLE – LAB 6 (40 pts)

**Practice with Advanced Queries & Relational Operators**

Refer to Chapters 6&7 of your textbook for information and practice in using subqueries, relational operators, and *decode( )* or *case* statements*.* More information can also be found in the Oracle Complete Reference book, Chapters 13 & 16.

Create a script file named lab6queries that contains the SQL statements to display the information requested below. Add the *set echo on* command to the top of the script. **In all cases**, please use subqueries or the relational operators union, intersect, or minus - even in cases where you would rather use a join (unless otherwise noted). After you have created your script file and have tested it and cleaned it up, run the script file echoing all commands and output. Save the results to a file named lab6results.txt. Submit the cleaned up copy of the results file to the online dropbox when you have completed it. Please copy/paste the actual questions from this instruction sheet into your script file as comments (--#1. Display the full….). For tasks that require you to answer questions, simply code your response using comments into your script or results file.

Note: Study the raw data before you attempt any of the tasks outlined below. Understand that an actual aircraft charter company might have hundreds of customers and many more aircraft than our sample DB and that you wouldn’t necessarily be able to eyeball the tables to retrieve the answers to these questions in a real world scenario. Therefore, queries must be ­scalable and work with larger data sets.

**For queries#1-8, use the Cloud Aviation Company tables that you created and populated for previous labs.**

1. Display the full name (ex. Tom R. Brown) of each aviation customer who has chartered a plane from us.
2. Display the full name and customer balance of all aviation customers who have chartered planes to Atlanta (ATL).
3. Display the full names (ex. Mr. Tom R Davis) and hire dates (ex. March 21, 2000) of all aviation employees who have earned ratings that have also been earned by employee 104.
4. Display the full name and date of birth (using 4-digit years) of each aviation employee who is older than Elizabeth Travis.
5. Display the full name and phone number of each aviation customer who has chartered as many or more planes than customer#10011.
6. Display the aircraft number, model code, manufacturer and model name of the aircraft that was most recently chartered. Hint: June 1, 2014 is more recent than June 1, 2013. Be sure that your query will still work if multiple aircraft were chartered on the same day. **You are permitted to use one inner join to get the manufacturer and model name displayed as part of the result set. Your query must include at least one nested query to earn full credit.**
7. Display the aircraft number and model code of all aircraft that have a higher AVERAGE charter hours flown than aircraft#2778V.
8. Display the full name and phone number of each aviation customer who has not chartered a plane.

**For queries#9, 10 and 11, use the SALESREP and SALESREP\_LEADERS tables owned by user JJ. Your queries must be constructed using the relational operators union, intersect, or minus. Sales reps in the SALESREP\_LEADER table have won a special award for selling a certain amount and brand of particular targeted products. Some of the people in the leader table no longer work for the company. All sales reps in the SALESREP table are current employees.**

1. Display sales rep id, full name and highest degree earned of all sales reps that have won leader awards and are current employees.
2. Display sales rep id, full name and hire date of all sales reps that are either current employees or have won leader awards.
3. We want to invite all sales leaders to a special ceremony in their honor. We have already sent email to existing employees using company email. However we wish to invite former leaders who are no longer employees. Write a query that will provide the appropriate contact information and insert a comment into your script explaining how the executive assistant can use the information to do the invitation.

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1. Use the DECODE( ) statement to display the product name, description, cost and selling priority from **user JJ**’s **PRODUCT** table, where the selling priority is derived from the BRAND value as follows: Discount => Low priority – don’t encourage, House => Only sell if customer requests it, Premium => High Priority – Push!, all others => Brand Unknown.
2. Use a CASE statement that produces the same result as #12.
3. Use a DECODE or CASE statement to display words for **JJ’s PRODUCT COST column** as follows:

$5.00 or below => “Low Price”

Greater than $5.00 and less than $20.00 “Moderate Price”

$20.00 and above “High Price”

Be sure to include enough of the other columns from the table to make the output meaningful.