

Applying SQL #3

(45 points est. time: 90 minutes)

Background

This exercise has you use material you've seen in Chapters 4-6 our Oracle SQL text. You will use the objects in the Issue25 and Student schemas. You will find it helpful to use the schema handouts.

Tasks

1. Launch *SQL*Plus* and connect to our *cis119do* database.
2. Spool the results of your session to a text file.
3. Issue the following commands:

```
SQL>set pagesize 60
SQL>set linesize 120
SQL> select user, to_char(sysdate,
'MON-DD HH:MI am') from dual;
```


4. Show the last name, first name and last contact date for writers who have a last contact date *later* than 04/02/1999. Your *criterion* must express the desired date as **04/02/1999**.
5. Show the title, length and issue date for any article longer than 2000 words. Use datatype conversion functions to display the issue date with the month name spelled out, with the day of the month suppressed, and all four digits of the year (eg: **01-NOV-87** displays as **November 1987**). Have the column heading for the issue date say Published on.
6. Show the title, issue date, and (calculate) the number of months ago the article was published. Round the number of months to the *closest* whole number. Exclude both BUS and LAW articles.
7. Congress recently passed the DTV Delay Act, which extends the deadline for full-power broadcast TV stations to complete the DTV transition from February 17, 2009, to June 12, 2009. Develop a statement that displays three results: (1) the number of days the deadline was extended, (2) the number of days remaining until the new deadline, (3) the day of the week the new deadline falls on.

8. For each writer who is a *freelancer*, show full name (eg: Trollden, Tom), amount, and last contact date. Use data type conversion functions (not *SQL*Plus* formatting commands) to format the amounts with a dollar sign and two decimal digits (i.e., 400 appears as \$400.00). Also, calculate and display the number of days since the writer was last contacted, always rounded up to the next highest whole number.
9. Use the online documentation to learn about the SQL function named RANK. Then use the RANK function to show each writer's full name, their amount, and their rank of amount. Sort the rows by amount, as illustrated.

AUTHOR	AMOUNT	RANK
Nilsson, Tonya	475	1
Seeger, Wilhelm	375	2
Johnson, Leroy W.	150	3
Cox, Kelly	125	4
Kim, Chong	65	5
Epstein, Diane	55	6
Martinez, Maria	0	7
Martinez, Santos	0	7
Ngo, Thuy	0	7
Leavitt, Morris	0	7
Kim, Chong	0	7
Hall, Valerie	0	7
Cohen, Julia Rice	0	7
Yamamura, Shinjiro	0	7
Lawton, Pat	0	7
Waldeck, Kristine	0	7

10. Summarize the sections by showing, for each location, the number of sections using the location, and the maximum capacity.

LOCATION	Sections	Largest Capacity
H310	1	15
L214	15	25
L210	10	25
M500	1	25
M311	3	25
L507	15	25
L206	1	15
L500	2	15
L511	1	25
M200	1	15
L509	25	25
L211	3	25

Assignment continues 

11. Modify the previous query to show only locations which have at least 5 sections. Run the modified query.
12. Summarize the sections by showing each section's start **time** and the number of sections starting at each time.

Starting	# Sections
09:30 am	71
10:30 am	6
11:30 am	1

13. For each LAW article, show the title, and full name (eg: Trolen, Tom) of the author. Employ a meaningful column alias for the writer name column. Accomplish this using an ANSI92/SQL92 style join.
14. Modify your previous query to use an ANSI99/SQL99 style join. Run the modified query.
15. Show each article's title, issue, description and author's full name (eg: Tom Trolen), sorted primarily by description and secondarily by title, but show only articles published after 08/15/1997. Your *criterion* must express the issue date as **08/15/1997**. Use your choice of join style (ANSI92 or ANSI99).

16. For each writer, show writerid, last name and how many articles *of each type* they've written. Use your choice of join style (ANSI92 or ANSI99).

WRIT LN	TYP # of Articles	
C200 Cox	ITV	1
C500 Cohen	POL	1
E235 Epstein	BUS	1
H400 Hall	EXP	1
H400 Hall	LAW	1
H400 Hall	TEC	1
J525 Johnson	BUS	3
. . .		

17. Open your spooled text file in a word processor. Use the Courier New font and change the font size to 8 or 10 points.
18. Edit the file to *remove* mistakes. Do not type any new commands or simulated output.
19. Type the task number (4-16) to identify each command.
20. Save and print your text file.