**TERM – WINTER 2023**

| **Course & Section Code:** | **DBS501S1A** |
| --- | --- |
| **Course Name:** | **Procedure Using Oracles PL/SQL** |
| **Course Start & End Dates:** |  |
| **Q&A / Virtual Office Hour:** | **6:30 PM – 9:30 PM** |
| **Instructor Name & Email:** | **Ersan Cam: ersan.cam@senecacollege.ca** |

Lab#1

(Group by-Advance Group By)

Instructions for delivery of this Labs file back to instructor.

**Step 1:** Download this word copy of Lab document.

**Step2:** Work on your question in SQL Developer.

**Step3:** Once you solve the problem copy paste the code under each question and Highlight with RED color

**Step4:** Also go to your Sql Developer and capture screen entire screen with command you execute and result at the bottom. Use Snipping tool in windows to capture screen shot. Below picture shows how to open free windows based snipping screen capture tool

Step5: Drop your finalized & saved word document to respective Lab dropbox assignment folder.

**Please note that Instructor has keep the right to call out any students randomly to ask demonstration their solution, and walk thru their work and justify their answers in one on one breakout room.**

**The tool to capture screen shot.**

Graphical user interface, text, application

Description automatically generated

**Demo Question.**

How to execute Sequence.Nextval command?

Demo Answer:

Copy paste of actual command: SELECT std\_seq.NEXTVAL FROM DUAL;

Demo Screen shot:

Copy paste screen shot of same command

Graphical user interface, text, application, email

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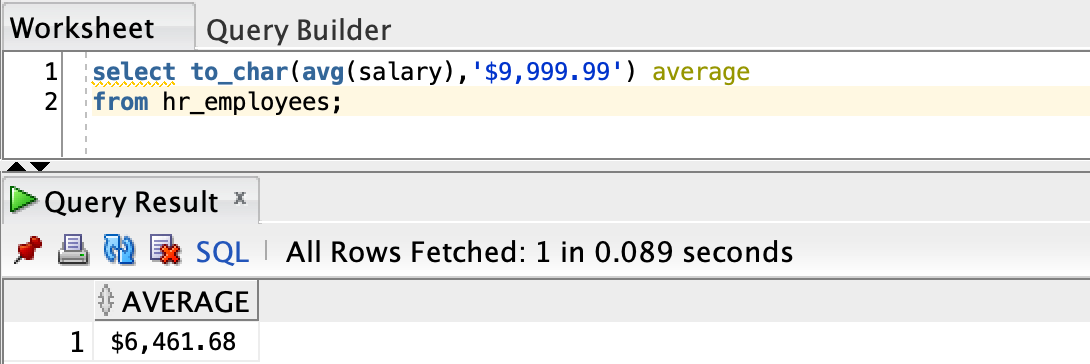
**Subject: Groupping the data. Lab Questions . Total 5 questions ,each 20 points, total 100**

**Use HumanResources (HR) database schema to resolve below Question 1,2 and 3**

1. What is the average salary in this organization (Employees Table)?

**select to\_char(avg(salary),'$9,999.99') average**

**from hr\_employees;**

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1. Display job ID for jobs with average salary more than 10000.

**select job\_id, avg(salary)**

**from hr\_employees**

**where salary > 10000**

**group by job\_id;**

Table

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1. Display job ID, number of employees, sum of salary, and difference between highest salary and lowest salary of the employees of the job.

**select job\_id, count(\*), sum(salary), max(salary) - min(salary) salary\_difference**

**from hr\_employees**

**group by job\_id;**

Table

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**Use SalesCo DWH database schema to resolve below Question 4 and 5**

**4. What is the SQL command to list the total sales by customer and by product, with subtotals by customer and a grand total for all product sales?**

Hint:

GROUP BY **ROLLUP** (column1, column2);

**select cus\_code, p\_code, sum(sale\_units \* sale\_price) subtotals**

**from dwdaysalesfact**

**group by rollup(p\_code, cus\_code);**

Graphical user interface, application

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**5. Using the answer to Problem 10 as your base, what command would you need to generate the same output but with subtotals in all columns? (*Hint*: Use the CUBE command).**

Hint:

GROUP BY CUBE (Column1, Column 2);

**select cus\_code, p\_code, sum(sale\_units \* sale\_price) subtotals**

**from dwdaysalesfact**

**group by cube(cus\_code, p\_code)**

**order by cus\_code;**

**Graphical user interface, table

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