**TERM : FALL 2022**

**A picture containing logo

Description automatically generated**

| **Course & Section Code:** | **COMP214** |
| --- | --- |
| **Course Name:** | **Advanced Database Concept** |
|  |  |
| **Q&A / Virtual Office Hour:** | **Sundays** |
| **Instructor Name & Email:** | Ersan Cam  [ecam@my.centennialcollege.ca](mailto:ecam@my.centennialcollege.ca) |

Assigment#2

**Due Date : October 30th**

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

Description automatically generated

**1. Create convertion program from meter to kilometer or vice versa**

In this task, you use nested IF statements. This script converts the value of a distance from one

system to another. If the distance is supplied in mt, it is converted to km, and vice versa.gj,

DECLARE

v\_distanceNum NUMBER(8) := '&v\_distanceNum';

v\_distanceUnit varchar2(8) := UPPER('&v\_distanceUnit');

v\_convrsnDistance NUMBER(8,5);

BEGIN

DBMS\_OUTPUT.PUT\_LINE('Please enter the distance :' );

DBMS\_OUTPUT.PUT\_LINE('Please enter the unit- m or Km :' );

IF v\_distanceUnit = ('M')THEN

v\_convrsnDistance:=v\_distanceNum/1000;

DBMS\_OUTPUT.PUT\_LINE('The distance in Kilometers is' || ' ' || v\_convrsnDistance || 'km' );

ELSIF v\_distanceUnit = ('KM')THEN

v\_convrsnDistance:=v\_distanceNum\*1000;

DBMS\_OUTPUT.PUT\_LINE('The distance in meters is' || ' ' || v\_convrsnDistance || 'm' );

END IF;

END;

Graphical user interface, text, application, email

Description automatically generated

**2.Create convertion program from Foot(ft) to cm or vice versa**

In this task, you use nested IF statements. This script converts the value of a measurement from one system to another. If the distance is supplied in ft, it is converted to cm, and vice versa.

DECLARE

v\_lengthNum NUMBER(8,5) := '&v\_lengthNum';

v\_lengthUnit varchar2(8) := UPPER('&v\_lengthUnit');

v\_convrsnLength NUMBER(8,5);

BEGIN

DBMS\_OUTPUT.PUT\_LINE('Please enter the distance :' );

DBMS\_OUTPUT.PUT\_LINE('Please enter the unit- ft or cm :' );

IF v\_lengthUnit = ('CM')THEN

v\_convrsnLength:=v\_lengthNum/30.48;

DBMS\_OUTPUT.PUT\_LINE('The distance in feet is' || ' ' || v\_convrsnLength || 'Feet' );

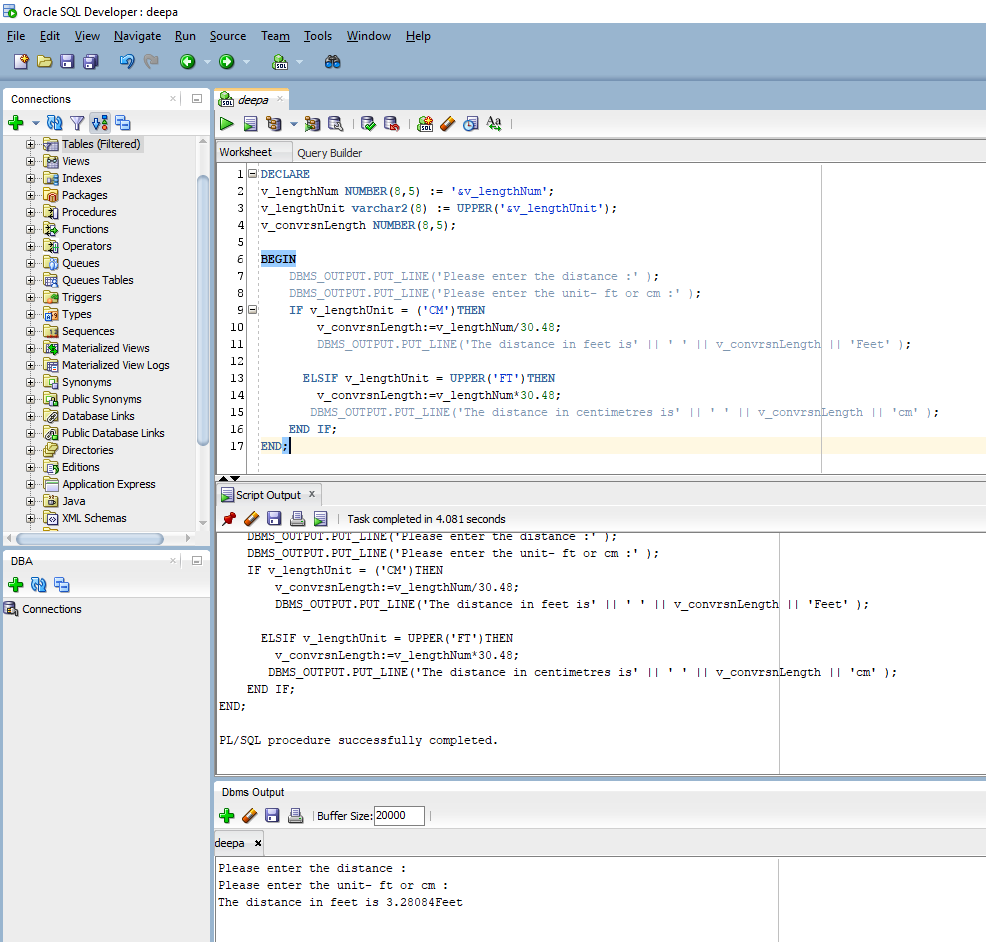
ELSIF v\_lengthUnit = UPPER('FT')THEN

v\_convrsnLength:=v\_lengthNum\*30.48;

DBMS\_OUTPUT.PUT\_LINE('The distance in centimetres is' || ' ' || v\_convrsnLength || 'cm' );

END IF;

END;



**3.** Before you work on Quesiton 3 , please create a table because you will be inserting numbers in this Messages table

CREATE TABLE messages

( RESULTS NUMBER

)

Run below query to see if there is any data :

SELECT \* FROM MESSAGES

Write a PL/SQL Programming block to do below actionsApplication

Description automatically generated with low confidence

Run below query to see if there is any data :

SELECT \* FROM MESSAGES

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application

Description automatically generated

DECLARE

v\_num NUMBER(8) :=0;

BEGIN

FOR v\_num IN 1..10 LOOP

IF v\_num NOT IN (6,8) THEN

INSERT INTO messages(RESULTS)

VALUES (v\_num);

END IF;

END LOOP;

END;

Graphical user interface, text, application, email

Description automatically generated

SELECT \* from messages;

Graphical user interface, text, application

Description automatically generated

**4) In this task you will ask the end user how many side shape has and based on the entry you will print name of the shape**

For example ;

if user answers 3 for number of side then you need to print Triangle

if user answers 4 for number of side then you need to print Rectangle

if user answers 5 for number of side then you need to print Pentagon

if user answers 6 for number of side then you need to print Hexagon

if user answers 8 for number of side then you need to print Octagon

Anything else other than these numbers print No shape available

DECLARE

v\_sides NUMBER(8) := '&v\_sides';

BEGIN

DBMS\_OUTPUT.PUT\_LINE('Please enter a number:');

IF v\_sides = 3 THEN

DBMS\_OUTPUT.PUT\_LINE('You have entered three sides.The shape is a Triangle' );

ELSIF v\_sides = 4 THEN

DBMS\_OUTPUT.PUT\_LINE('You have entered four sides.The shape is a Square' );

ELSIF v\_sides = 5 THEN

DBMS\_OUTPUT.PUT\_LINE('You have entered five sides. The shape is a Pentagon' );

ELSIF v\_sides = 6 THEN

DBMS\_OUTPUT.PUT\_LINE('You have entered six sides. The shape is a Hexagon' );

ELSIF v\_sides = 7 THEN

DBMS\_OUTPUT.PUT\_LINE('You have entered seven sides. The shape is a Heptagon' );

ELSIF v\_sides = 8 THEN

DBMS\_OUTPUT.PUT\_LINE('You have entered eight sides. The shape is a Octagon' );

ELSE

DBMS\_OUTPUT.PUT\_LINE(' The sides entered is out of range. No Shape available');

END IF;

END;

Graphical user interface, text, application, email

Description automatically generated

Graphical user interface, text, application, email

Description automatically generated

**5.** **Ask the user their name and how many times they want to output their name (using a for loop).**

Hint:

*DECLARE*

*v\_name varchar(50) := '&name';*

*v\_hmtimes number :=&numb;*

*BEGIN*

*FOR i IN 1.XXXXX LOOP*

*END LOOP;*

*END;*

DECLARE

v\_name varchar(20) := '&name';

v\_hmtimes number(8) := '&numb';

BEGIN

DBMS\_OUTPUT.PUT\_LINE('Please enter your name:');

DBMS\_OUTPUT.PUT\_LINE('Please enter the number of times you want to output your name');

FOR i IN 1..v\_hmtimes LOOP

DBMS\_OUTPUT.PUT\_LINE(v\_name);

END LOOP;

END;

Graphical user interface, text, application, email

Description automatically generated