## ORA725 , ASSIGNMENT TWO – Part 2, due on Thursday, April 13<sup>th</sup> by 2pm

## *Submit your PRINTOUT of all solutions and outputs* Your code must encompass ALL Test cases given here.

1. Write the PL/SQL block that will as input accept the two letter Country Code (check table COUNTRIES for valid values) and then it will find all locations (Cities) with empty Province information. Then it will modify this blank value to a string of same symbols, with its length determined by the length of the Street Address string.

If the city's first letter is A, B, E or F then the string will contain only \* symbol, if its first letter is C,D, G or H then it will be **&** symbol, otherwise it will be **#** symbol.

Show also the modified row from Locations table and then Undo your change. You need also to code for following cases: there is MORE THAN ONE City with empty province and also if the Country Code does NOT have any Cities in the Locations table.

Here are the possible scenarios:

PL/SQL procedure successfully completed.

LOCATION_ID STREET_ADDRESS		POSTAL_CODE	
CITY	STATE_PROVINCE	СО	
1300 9450 Kami Hiroshima	ya-cho &&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&&	 6823 &&&& JP	
Rollback complete.			
SQL> @q1; Enter value for country: <b>UK</b> City London has modified its province to #################			
PL/SQL procedure suc	ccessfully completed	d.	
LOCATION_ID STREET	_ADDRESS	POSTAL_CODE	
CITY	STATE_PROVINCE	СО	
2400 8204 Arthu London	r St #############	 #### UK	

Rollback complete.

SQL> @q1; Enter value for country: IT This country has MORE THAN ONE City without province listed.

PL/SQL procedure successfully completed.

no rows selected

Rollback complete.

SQL> @q1; Enter value for country: **RS** This country has NO cities listed.

PL/SQL procedure successfully completed.

no rows selected

2. Firstly, modify your table COUNTRIES by adding a new column called FLAG of fixed character length (7 characters).

Write the PL/SQL block so that will as input accept Region Id (check table REGIONS for valid values) and then it will find all Countries with empty Location information (without City listed in that country). Then it will modify blank value in the column Flag for all such countries to become **EMPTY\_n** (where **n** is **their** Region Id).

Next, it will populate INDEX TABLE with all country names (without cities) in the alphabetical order, so that their key values increase by 5 (starting from 1). Also, display all their elements, count total number of elements in the INDEX TABLE and finally display SECOND and BEFORE THE LAST element in the table (without using literal key value).

Then, it will display message about all countries with NO city listed for the provided Region Id in the alphabetical order including their total count.

Show also all modified rows from Countries table sorted by Region Id and then by country name and finally Undo your change.

You need also to code for the case: the provided Region does NOT exist. <u>Hint:</u> Use Cursor For Loops where necessary and do NOT use Exception handler.

Here are the possible scenarios:

SQL> @q2; Enter value for region: 5 This region ID does NOT exist: 5

PL/SQL procedure successfully completed.

no rows selected

Rollback complete.

SQL> @q2; Enter value for region: 1 Index Table Key: 1 has a value of Argentina

Index Table Key: 6 has a value of Belgium Index Table Key: 11 has a value of Denmark Index Table Key: 16 has a value of Egypt Index Table Kev: 21 has a value of France Index Table Key: 26 has a value of HongKong Index Table Key: 31 has a value of Israel Index Table Kev: 36 has a value of Kuwait Index Table Key: 41 has a value of Nigeria Index Table Key: 46 has a value of Zambia Index Table Key: 51 has a value of Zimbabwe \_\_\_\_\_\_ \_\_\_\_\_ Total number of elements in the Index Table or Number of countries with NO cities listed is: 11 Second element (Country) in the Index Table is: Belgium Before the last element (Country) in the Index Table is: Zambia \_\_\_\_\_\_ \_\_\_\_\_ In the region 1 there is country Belgium with NO city. In the region 1 there is country Denmark with NO city. In the region 1 there is country France with NO city. \_\_\_\_\_ \_\_\_\_\_

Total Number of countries with NO cities listed in the Region 1 is: 3

PL/SQL procedure successfully completed.

CO COUNTRY NAME **REGION ID FLAG** ------ ------BE Belgium 1 Empty 1 DK Denmark 1 Empty 1 1 Empty 1 FR France AR Argentina 2 Empty 2 3 Empty 3 HK HongKong EG Egypt 4 Empty 4 IL Israel 4 Empty 4 KW Kuwait 4 Empty 4 NG Nigeria 4 Empty 4 ZM Zambia 4 Empty 4 ZW Zimbabwe 4 Empty 4

11 rows selected.

Rollback complete.

SQL> @q2; Enter value for region: 2 Index Table Key: 1 has a value of Argentina Index Table Key: 6 has a value of Belgium Index Table Key: 11 has a value of Denmark

Index Table Key: 16 has a value of Egypt Index Table Key: 21 has a value of France Index Table Key: 26 has a value of HongKong Index Table Kev: 31 has a value of Israel Index Table Key: 36 has a value of Kuwait Index Table Key: 41 has a value of Nigeria Index Table Key: 46 has a value of Zambia Index Table Key: 51 has a value of Zimbabwe \_\_\_\_\_\_\_ Total number of elements in the Index Table or Number of countries with NO cities listed is: 11 Second element (Country) in the Index Table is: Belgium Before the last element (Country) in the Index Table is: Zambia \_\_\_\_\_\_ \_\_\_\_\_ In the region 2 there is country Argentina with NO city. \_\_\_\_\_\_ \_\_\_\_\_

Total Number of countries with NO cities listed in the Region 2 is: 1

PL/SQL procedure successfully completed.

CO COUNTRY NAME **REGION ID FLAG** -- ------ ------BE Belgium 1 Empty 1 1 Empty\_1 DK Denmark FR France 1 Empty 1 AR Argentina 2 Empty 2 HK HongKong 3 Empty 3 EG Egypt 4 Empty 4 4 Empty\_4 IL Israel KW Kuwait 4 Empty 4 NG Nigeria 4 Empty 4 ZM Zambia 4 Empty 4 ZW Zimbabwe 4 Empty 4

11 rows selected. Rollback complete.

PL/SQL procedure successfully completed.