# PL/SQL Practice Exercises

1. **Using a cursor**

For each title in the Title table, display the title.

On the second line, display "Authors: " followed by a list of all authors of the title, in the order specified by the auOrder column.

On the third line, display "Edited by: " followed by a list of all editors of the title, in the order specified by the edOrder column. It is suggested that you create a cursor for each of the parts and have several nested loops. NOTE: DBMS\_OUTPUT.PUT doesn’t insert a new line at the end.

1. **Writing a procedure**

Write a procedure that accepts four parameters: titleID, loRange, hiRange, royalty. The procedure should insert a new row into the RoySched table, but only if valid values are provided and the loRange/hiRange do not overlap with existing loRange/hiRange values for that titleID. If the procedure is given an invalid titleID, the procedure should generate an error code of -20950 with an error message of "No such titleID: <titleID>". If the loRange is greater than the hiRange, the procedure should generate an error code of -20951 with a message of "Low range must be lower than high range: <loRange>, <hiRange>". If the range values overlap, the procedure should generate an error code of -20952 with an error message of "Range overlaps existing range: <loRange>, <hiRange>".

Write anonymous PL/SQL blocks to call your procedure with valid and invalid data. View the data in the RoySched table to confirm the procedure worked. Do a ROLLBACK between execution attempts or recreate your bookbiz tables if necessary. Note that CREATE statements do an implicit commit, so do any ROLLBACK before reissuing any CREATE statements.

1. **Writing a function**

Write a function that accepts two parameters: a first name and a last name. The function should find the author record that matches the given values and return the author's id number. If there is no author with the given name, the procedure should generate an error code of -20900 with an error message of "No such author: <first> <last>". If there is more than one author with the name, the procedure should generate an error code of -20901 with an error message of "More than one author named <first> <last>".

Write code to test your program and verify it works for valid and invalid parameters. (You may need to add a new row to the Author table to check the duplicate name scenario.)