

## ***Unit 7 Assignment Solution***

Develop a SQL query that will select all of the books that are currently checked out and are

past due to be returned, which have a value greater than \$10.00. Your query must return the name, address, postal code, and phone number of the borrower, the name and phone number of the librarian responsible for the transaction, the date the book was due to be returned, and the name, cost, and ISBN number of the book. You query should sort the list

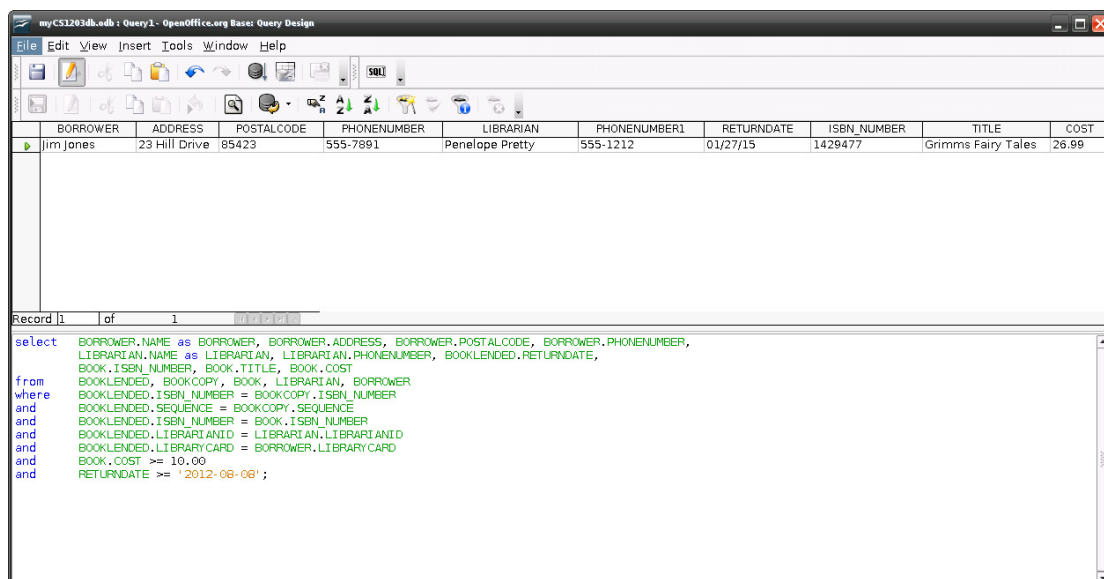
by the return date in descending order.

You must submit both your SQL query and the output of executing your query against your database.

### **SQL Statement**

```
select BORROWER.NAME as BORROWER, BORROWER.ADDRESS,
BORROWER.POSTALCODE,
BORROWER.PHONENUMBER,
LIBRARIAN.NAME as LIBRARIAN, LIBRARIAN.PHONENUMBER,
BOOKLENDED.RETURNDATE,
BOOK.ISBN_NUMBER, BOOK.TITLE, BOOK.COST
from BOOKLENDED, BOOKCOPY, BOOK, LIBRARIAN, BORROWER
where BOOKLENDED.ISBN_NUMBER = BOOKCOPY.ISBN_NUMBER
and BOOKLENDED.SEQUENCE = BOOKCOPY.SEQUENCE
and BOOKLENDED.ISBN_NUMBER = BOOK.ISBN_NUMBER
and BOOKLENDED.LIBRARIANID = LIBRARIAN.LIBRARIANID
and BOOKLENDED.LIBRARYCARD = BORROWER.LIBRARYCARD
and BOOK.COST >= 10.00
and RETURNDATE <= '2012-08-08';
```

### **Output of SQL Statement**



The screenshot shows a database query tool window titled 'myCS1203db.mdb: Query1 - OpenOffice.org Base: Query Design'. The window has a menu bar (File, Edit, View, Insert, Tools, Window, Help) and a toolbar. Below the toolbar is a grid showing the results of the query. The grid has 10 columns: BORROWER, ADDRESS, POSTALCODE, PHONENUMBER, LIBRARIAN, PHONENUMBER1, RETURNDATE, ISBN\_NUMBER, TITLE, and COST. The first row of data shows: Jim Jones, 23 Hill Drive, 85423, 555-7891, Penelope Pretty, 555-1212, 01/27/15, 1429477, Grimms Fairy Tales, and 26.99. Below the grid, there is a status bar indicating 'Record 1 of 1'. At the bottom of the window, the SQL statement is displayed in a text area.

BORROWER	ADDRESS	POSTALCODE	PHONENUMBER	LIBRARIAN	PHONENUMBER1	RETURNDATE	ISBN_NUMBER	TITLE	COST
Jim Jones	23 Hill Drive	85423	555-7891	Penelope Pretty	555-1212	01/27/15	1429477	Grimms Fairy Tales	26.99

```
select BORROWER.NAME as BORROWER, BORROWER.ADDRESS, BORROWER.POSTALCODE, BORROWER.PHONENUMBER,
LIBRARIAN.NAME as LIBRARIAN, LIBRARIAN.PHONENUMBER, BOOKLENDED.RETURNDATE,
BOOK.ISBN_NUMBER, BOOK.TITLE, BOOK.COST
from BOOKLENDED, BOOKCOPY, BOOK, LIBRARIAN, BORROWER
where BOOKLENDED.ISBN_NUMBER = BOOKCOPY.ISBN_NUMBER
and BOOKLENDED.SEQUENCE = BOOKCOPY.SEQUENCE
and BOOKLENDED.ISBN_NUMBER = BOOK.ISBN_NUMBER
and BOOKLENDED.LIBRARIANID = LIBRARIAN.LIBRARIANID
and BOOKLENDED.LIBRARYCARD = BORROWER.LIBRARYCARD
and BOOK.COST >= 10.00
and RETURNDATE <= '2012-08-08';
```

## Assignment Grading Rubric

- Does the assignment include the SQL statement?
- Does the assignment include the output that results from executing the SQL?
- Does the output include only those books with a value greater than \$10.00
- Does the output include only those books that are past due to be returned?
- Does the output include the following columns name, address, postal code, and phone number of the borrower, the name and phone number of the librarian responsible for the transaction, the date the book was due to be returned, and the name, cost, and ISBN number of the book?
- Are the rows in the output sorted in order by the return date in descending order (oldest date appears first)?

***NOTE: I assumed that some people would have problems using a function to get the current date so I have made the solution by specifying the date (hardcoded). If someone used any other method of determining the current date ASSUME that it is valid.***