**Programming Assignment**  
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. To find out if a loaned book is past due, you must compare the return date with the current date. 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 which is the oldest date should appear first in the list.  
  
You must submit both your SQL query and the output of executing your query against your database.

**Assignment Instructions:**  
  
- the assignment must include the SQL DML statements required to implement at least the following relations:  
 - Book  
 - Borrower  
 - BookLended  
 - Librarian  
-the assignment must make appropriate use of Null (and Not Null) parameters to ensure data validity. The minimum standard will be measured against the instructor’s example and will be based upon rules associated with primary and foreign keys and integrity constraint rules.  
-the assignment must make appropriate use of constraint clauses to ensure the referential integrity of the relations in the schema. The minimum standard will be measured against the instructor’s example and will be based upon rules associated with primary and foreign keys and integrity constraint rules.  
-the assignment must make appropriate use of keys including the automatic generation of key values where appropriate.

***Solution:***

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 BORROWER.LIBRARYCARD = BOOKLENDED.LIBRARYCARD

and CURDATE() > BOOKLENDED.RETURNDATE

and BOOK.COST > 10

ORDER BY BOOKLENDED.RETURNDATE DESC;

***Output***

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Arun Goel ,34 Home St,56234,555-4889,Mable Markham,555-1212 ,0007-04-02,6006374,A First Course in Database Systems,99.49,0007-04-02,