**ITC 5104 Database Design and SQL**

**Hands-On Assignment# 8**

**Due Date: March 12, 2019 beginning of class, through Blackboard**

1. Create a list that displays the title of each book and the name and phone number of the contact at the publisher’s office for reordering each book.

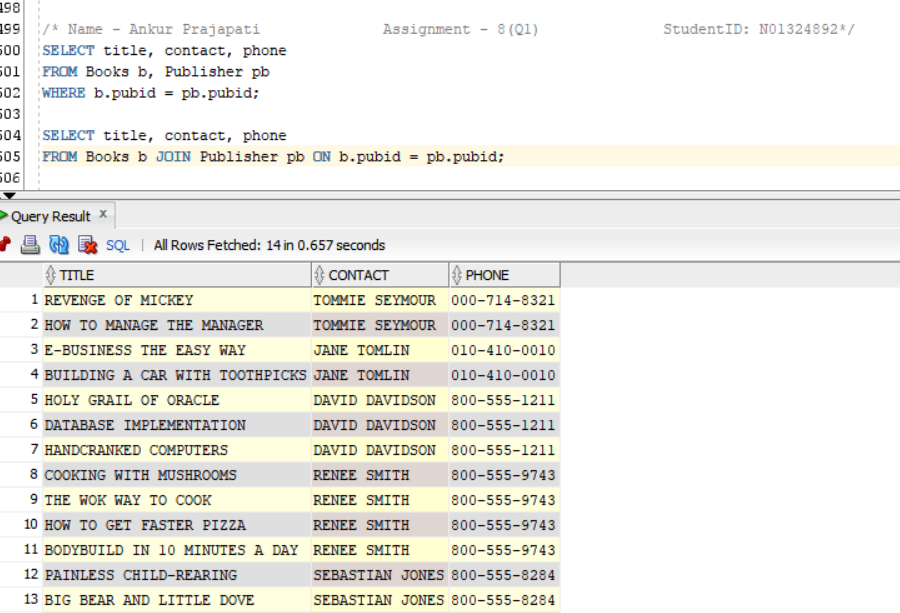
**SELECT title, contact, phone**

**FROM Books b, Publisher pb**

**WHERE b.pubid = pb.pubid;**

**SELECT title, contact, phone**

**FROM Books b JOIN Publisher pb ON b.pubid = pb.pubid;**

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2. Determine which orders haven’t yet shipped and the name of the customer who placed the order. Sort the results by the date on which the order was placed.

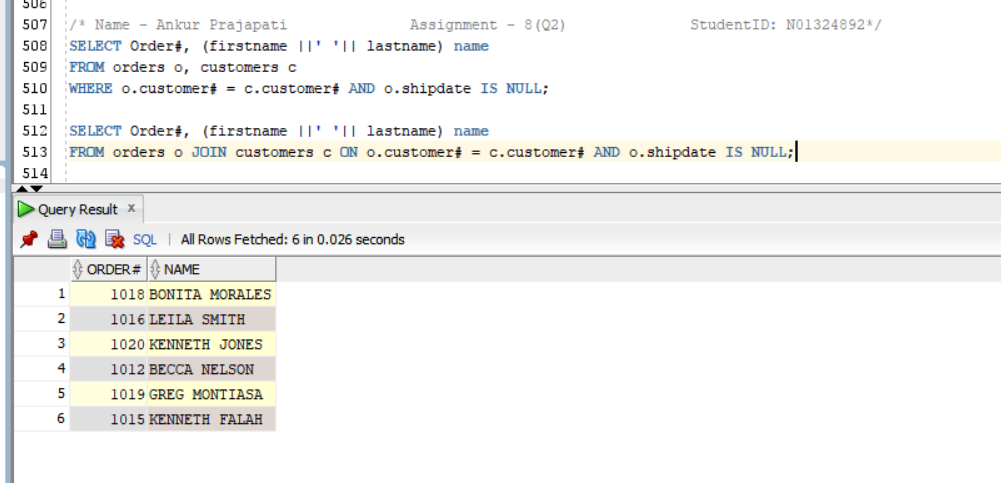
**SELECT Order#, (firstname ||' '|| lastname) name**

**FROM orders o, customers c**

**WHERE o.customer# = c.customer# AND o.shipdate IS NULL;**

**SELECT Order#, (firstname ||' '|| lastname) name**

**FROM orders o JOIN customers c ON o.customer# = c.customer# AND o.shipdate IS NULL;**



3. Produce a list of all customers who live in the state of Florida and have ordered books about computers.

**SELECT c.customer#, c.firstname ||' '|| c.lastname name, o.order#, oi.ISBN, b.category, c.state**

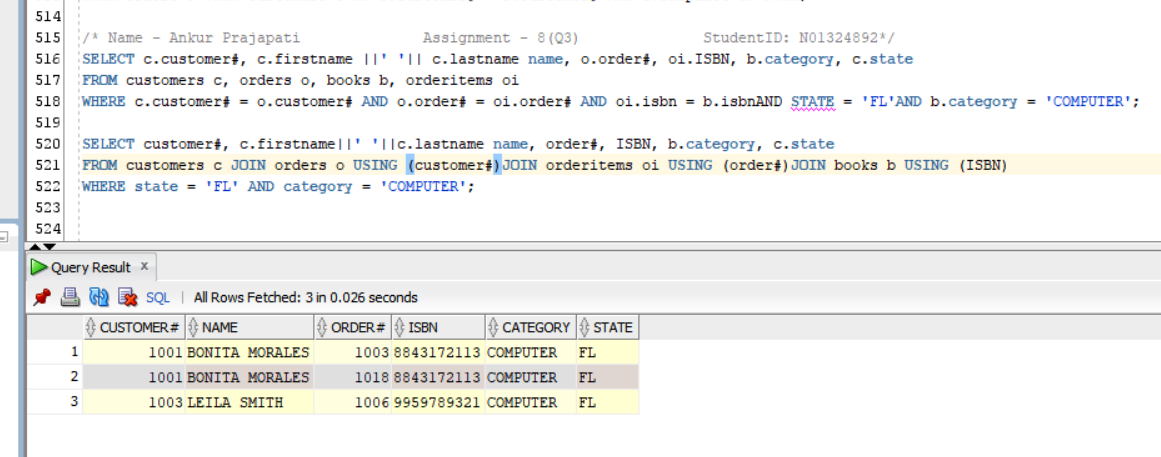
**FROM customers c, orders o, books b, orderitems oi**

**WHERE c.customer# = o.customer# AND o.order# = oi.order# AND oi.isbn = b.isbnAND STATE = 'FL'AND b.category = 'COMPUTER';**

**SELECT customer#, c.firstname||' '||c.lastname name, order#, ISBN, b.category, c.state**

**FROM customers c JOIN orders o USING (customer#)JOIN orderitems oi USING (order#)JOIN books b USING (ISBN)**

**WHERE state = 'FL' AND category = 'COMPUTER';**

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4. Determine which books customer Jake Lucas has purchased. Perform the search using the customer name, not the customer number. If he has purchased multiple copies of the same book, unduplicate the results.

**SELECT DISTINCT b.title FROM customers c, orders o, orderitems i, books b**

**WHERE c.customer#=o.customer#**

**AND o.order#=i.order#**

**AND i.isbn=b.isbn**

**AND c.firstname='JAKE'**

**AND c.lastname='LUCAS';**

**SELECT DISTINCT b.title**

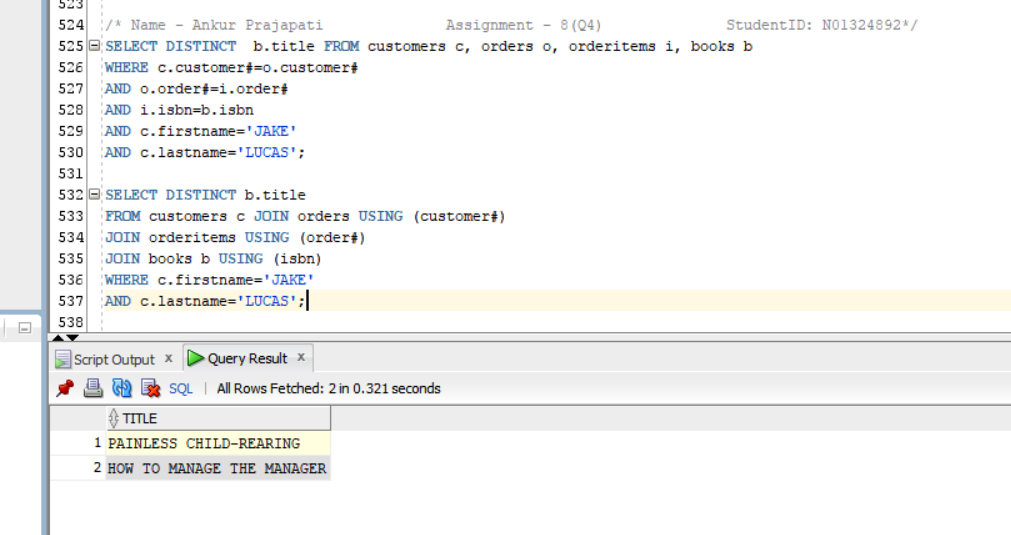
**FROM customers c JOIN orders USING (customer#)**

**JOIN orderitems USING (order#)**

**JOIN books b USING (isbn)**

**WHERE c.firstname='JAKE'**

**AND c.lastname='LUCAS';**

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5. Determine the profit of each book sold to Jake Lucas, using the actual price the customer paid (not the book’s regular retail price). Sort the results by order date. If more than one book was ordered, sort the results by profit amount in descending order. Perform the search using the customer name, not the customer number.

**SELECT b.title, i.paideach-cost**

**FROM customers c, orders o, orderitems i, books b**

**WHERE c.customer#=o.customer#**

**AND o.order#=i.order#**

**AND i.isbn=b.isbn**

**AND c.firstname='JAKE'**

**AND c.lastname='LUCAS'**

**ORDER BY o.orderdate, i.paideach-b.cost DESC;**

**SELECT b.title, i.paideach-cost**

**FROM customers c JOIN orders o USING (customer#)**

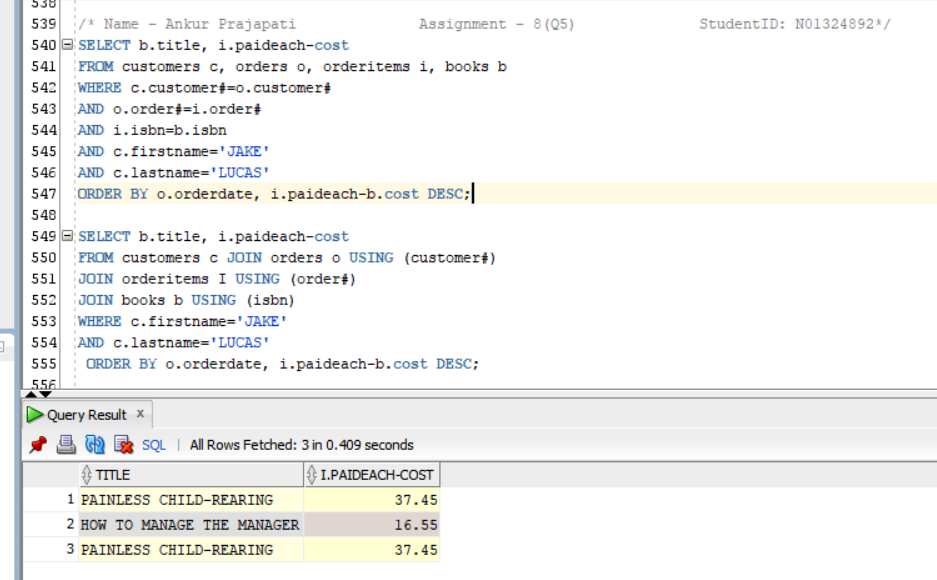
**JOIN orderitems I USING (order#)**

**JOIN books b USING (isbn)**

**WHERE c.firstname='JAKE'**

**AND c.lastname='LUCAS'**

**ORDER BY o.orderdate, i.paideach-b.cost DESC;**

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6. Which books were written by an author with the last name Adams? Perform the search using the author name.

**SELECT books.title**

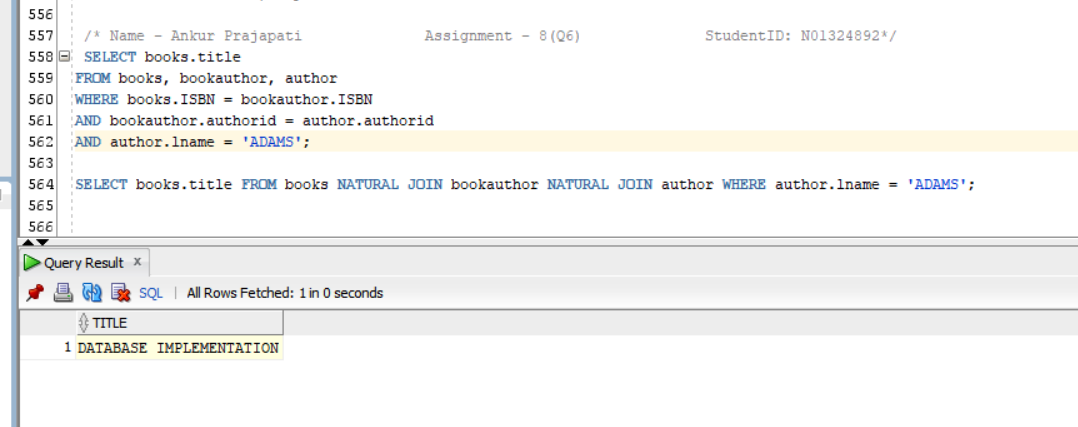
**FROM books, bookauthor, author**

**WHERE books.ISBN = bookauthor.ISBN**

**AND bookauthor.authorid = author.authorid**

**AND author.lname = 'ADAMS';**

**SELECT books.title FROM books NATURAL JOIN bookauthor NATURAL JOIN author WHERE author.lname = 'ADAMS';**

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7. What gift will a customer who orders the book Shortest Poems receive? Use the actual book retail value to determine the gift.

**SELECT BOOKS.TITLE, BOOKS.RETAIL "RETAIL COST",**

**ORDERS.SHIPCOST, ORDERITEMS.PAIDEACH,**

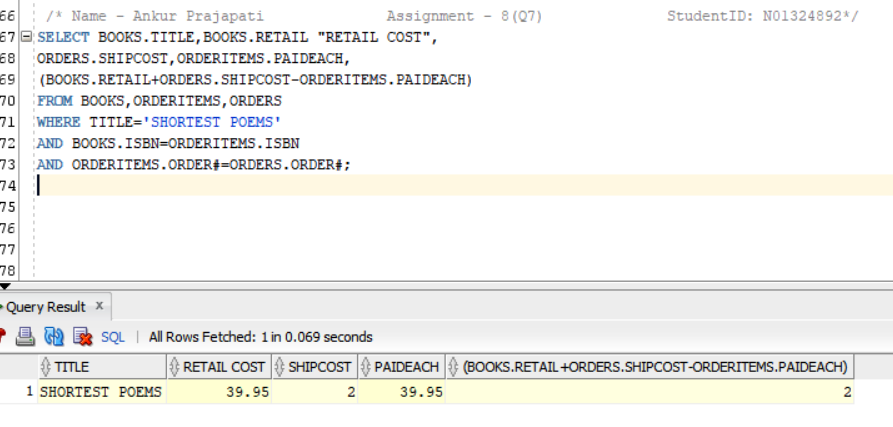
**(BOOKS.RETAIL+ORDERS.SHIPCOST-ORDERITEMS.PAIDEACH)**

**FROM BOOKS, ORDERITEMS, ORDERS**

**WHERE TITLE='SHORTEST POEMS'**

**AND BOOKS.ISBN=ORDERITEMS.ISBN**

**AND ORDERITEMS.ORDER#=ORDERS.ORDER#;**

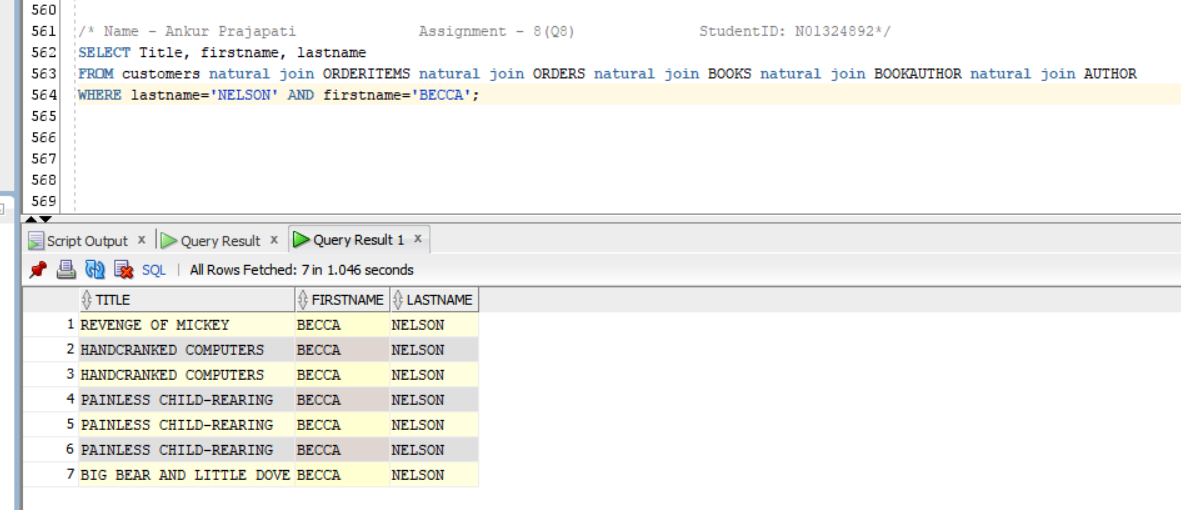
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8. Identify the authors of the books Becca Nelson ordered. Perform the search using the customer name.

**SELECT Title, firstname, lastname**

**FROM customers natural join ORDERITEMS natural join ORDERS natural join BOOKS natural join BOOKAUTHOR natural join AUTHOR**

**WHERE lastname='NELSON' AND firstname='BECCA';**

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9. Display a list of all books in the BOOKS table. If a book has been ordered by a customer, also list the corresponding order number and the state in which the customer resides.

**SELECT b.title, o.order#, c.state**

**FROM books b, orders o, orderitems i, customers c**

**WHERE c.customer#(+)=o.customer#**

**AND o.order#(+)=i.order#**

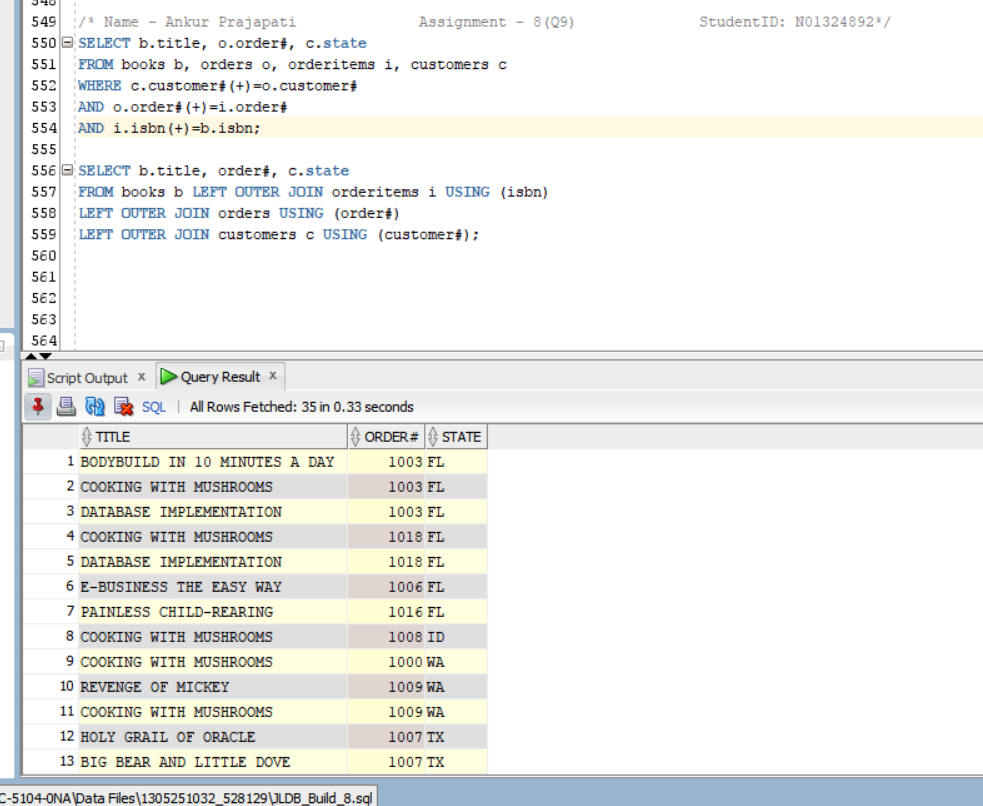
**AND i.isbn(+)=b.isbn;**

**SELECT b.title, order#, c.state**

**FROM books b LEFT OUTER JOIN orderitems i USING (isbn)**

**LEFT OUTER JOIN orders USING (order#)**

**LEFT OUTER JOIN customers c USING (customer#);**

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10. An EMPLOYEES table was added to the JustLee Books database to track employee information. Display a list of each employee’s name, job title, and manager’s name. Use column aliases to clearly identify employee and manager name values. Include all employees in the list and sort by manager name.

**SELECT e.FIRST\_NAME||' '||e.LAST\_NAME "Employee name", e.JOB\_ID,**

**m.FIRST\_NAME||' '||m.LAST\_NAME "Manager Name"**

**FROM employees\_test e, employees\_test m**

**WHERE e.MANAGER\_ID=m.EMPLOYEE\_ID(+)**

**ORDER BY "Manager Name";**

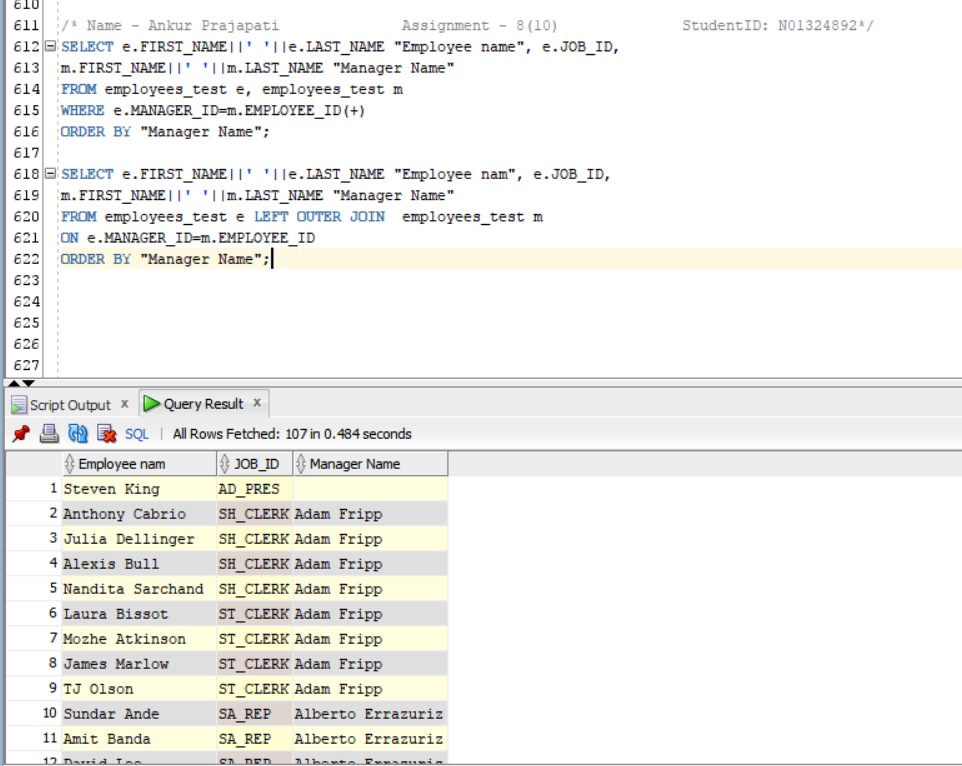
**SELECT e.FIRST\_NAME||' '||e.LAST\_NAME "Employee nam", e.JOB\_ID,**

**m.FIRST\_NAME||' '||m.LAST\_NAME "Manager Name"**

**FROM employees\_test e LEFT OUTER JOIN employees\_test m**

**ON e.MANAGER\_ID=m.EMPLOYEE\_ID**

**ORDER BY "Manager Name";**

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