**Course code: INFS1603**

**Tutorial session (**T18A**):**

**Week number (**Week 7**):**

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**Student Solution(s):**

Homework 5 (Due in Week 7)

**Hands-On Assignments**

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 b.pubid, b.title, p.contact, p.phone**

**FROM zjlb\_books b**

**JOIN zjlb\_publisher p**

**ON b.pubid = p.pubid;**

Text, table

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

**SELECT o.order#, c.customer#, c.lastname, c.firstname, c.state, b.title, b.category**

**FROM zjlb\_customers c**

**JOIN zjlb\_orders o**

**ON c.customer# = o.customer#**

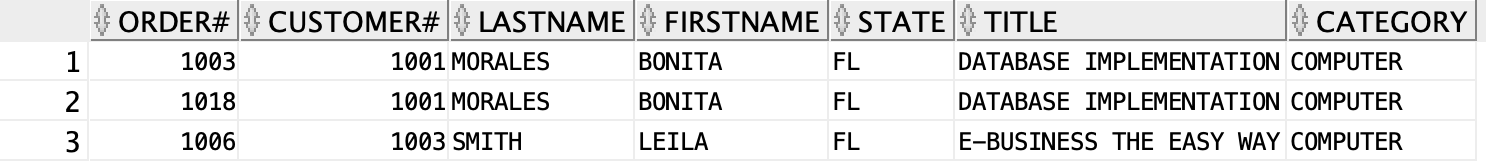
**JOIN zjlb\_orderitems oi**

**ON o.order# = oi.order#**

**JOIN zjlb\_books b**

**ON oi.ISBN = b.ISBN**

**WHERE c.state = 'FL' AND b.category = 'COMPUTER';**



3. 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 c.lastname, c.firstname, b.title**

**FROM zjlb\_customers c**

**JOIN zjlb\_orders o**

**ON c.customer# = o.customer#**

**JOIN zjlb\_orderitems oi**

**ON o.order# = oi.order#**

**JOIN zjlb\_books b**

**ON oi.ISBN = b.ISBN**

**WHERE c.lastname = 'LUCAS' AND c.firstname = 'JAKE';**

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4. 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 c.lastname, c.firstname, o.order#, b.title, oi.quantity, ((oi.paideach\*oi.quantity)-b.cost-o.shipcost) AS profit**

**FROM zjlb\_customers c**

**JOIN zjlb\_orders o**

**ON c.customer# = o.customer#**

**JOIN zjlb\_orderitems oi**

**ON o.order# = oi.order#**

**JOIN zjlb\_books b**

**ON oi.ISBN = b.ISBN**

**WHERE c.lastname = 'LUCAS' AND c.firstname = 'JAKE'**

**ORDER BY profit DESC;**

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5. 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.isbn, b.title, oi.order#, c.state**

**FROM zjlb\_books b**

**LEFT JOIN zjlb\_orderitems oi**

**ON b.isbn = oi.isbn**

**LEFT JOIN zjlb\_orders o**

**ON oi.order# = o.order#**

**LEFT JOIN zjlb\_customers c**

**ON o.customer# = c.customer#**

**ORDER BY b.title ASC;**

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6. 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**

**e1.first\_name || ' ' || e1.last\_name AS Employee\_Full\_Name,**

**j.job\_title,**

**e2.first\_name || ' ' || e2.last\_name AS Manager\_Full\_Name**

**FROM employees e1**

**LEFT JOIN departments d**

**ON e1.manager\_id = d.manager\_id**

**LEFT JOIN employees e2**

**ON d.manager\_id = e2.employee\_id**

**LEFT JOIN jobs j**

**ON e1.job\_id = j.job\_id**

**ORDER BY Employee\_Full\_Name;**

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**Advanced Challenge**

Query for determining projected costs: join the books and publishers table to match all books with their publishers. Profit is calculated by using the retail and cost columns inside the books table. Used promotions table to write a case clause – for determining the gift matched to each book.

**SELECT b.isbn, (b.retail-b.cost) as profit, p.name,**

**CASE**

**WHEN b.retail > 0 AND b.retail <= 12 THEN 'Bookmarker'**

**WHEN b.retail > 12 AND b.retail <= 25 THEN 'Book Labels'**

**WHEN b.retail > 25 AND b.retail <= 56 THEN 'Book Cover'**

**WHEN b.retail > 56 THEN 'Free Shipping'**

**END AS gift**

**FROM zjlb\_books b**

**INNER JOIN zjlb\_publisher p**

**ON b.pubid = p.pubid;**

**Table, Excel

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Query for determining what books didn’t sell: Take out ISBN values where there no orders – do this by comparing the list of all ISBNs with the ISBNs shown in the orderitems table, and then applying a minus set operator.

**SELECT isbn FROM zjlb\_books**

**MINUS**

**SELECT DISTINCT isbn FROM**

**zjlb\_orderitems oi;**

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