CSCD327 – Lab4

1)
SELECT ORDERS.order_num, CUSTOMERS.firstname, CUSTOMERS.lastname,
ORDERS.orderdate
FROM ORDERS NATURAL JOIN CUSTOMERS
WHERE shipdate is null
ORDER BY orderdate asc;

order_num	firstname	lastname	orderdate
1012	BECCA	NELSON	2009-04-03
1015	KENNETH	FALAH	2009-04-04
1016	LEILA	SMITH	2009-04-04
1018	BONITA	MORALES	2009-04-05
1019	GREG	MONTIASA	2009-04-05
1020	KENNETH	JONES	2009-04-05

2)
SELECT CUSTOMERS.customer_num, CUSTOMERS.firstname, CUSTOMERS.lastname,
ORDERITEMS.order_num
FROM CUSTOMERS NATURAL JOIN ORDERS
NATURAL JOIN ORDERITEMS
NATURAL JOIN BOOKS
WHERE BOOKS.Category = 'COMPUTER' and CUSTOMERS.State = 'FL';

customer_num	firstname	lastname	order_num
1001	BONITA	MORALES	1003
1001	BONITA	MORALES	1018
1003	LEILA	SMITH	1006

3)
SELECT DISTINCT BOOKS.title
FROM CUSTOMERS JOIN ORDERS
ON CUSTOMERS.Customer_num = ORDERS.Customer_num JOIN ORDERITEMS
ON ORDERS.Order_num = ORDERITEMS.Order_num JOIN BOOKS
ON BOOKS.ISBN = ORDERITEMS.ISBN
WHERE CUSTOMERS.FirstName = 'JAKE' and CUSTOMERS.LastName = 'LUCAS';

title
HOW TO MANAGE THE MANAGER
PAINLESS CHILD-REARING

4)
SELECT BOOKS.title, ORDERS.orderdate, (ORDERITEMS.PaidEach - BOOKS.Cost) AS
profit
FROM CUSTOMERS JOIN ORDERS

ON CUSTOMERS.Customer_num = ORDERS.Customer_num JOIN ORDERITEMS
ON ORDERS.Order_num = ORDERITEMS.Order_num JOIN BOOKS
ON BOOKS.ISBN = ORDERITEMS.ISBN
WHERE CUSTOMERS.FirstName = 'JAKE' and CUSTOMERS.LastName = 'LUCAS'
ORDER BY ORDERS.orderdate asc, profit desc;

title	orderdate	profit
PAINLESS CHILD-REARING	2009-03-31	37.45
HOW TO MANAGE THE MANAGER	2009-03-31	16.55
PAINLESS CHILD-REARING	2009-04-03	37.45

5)
SELECT BOOKS.ISBN, BOOKS.Title
FROM AUTHOR JOIN BOOKAUTHOR
ON AUTHOR.AuthorID = BOOKAUTHOR.AuthorID JOIN BOOKS
ON BOOKAUTHOR.ISBN = BOOKS.ISBN
WHERE AUTHOR.Lname = 'ADAMS';

ISBN	Title
8843172113	DATABASE IMPLEMENTATION

6)
SELECT AUTHOR.fname, AUTHOR.lname, BOOKS.title
FROM CUSTOMERS JOIN ORDERS
USING(customer_num) JOIN ORDERITEMS
USING(order_num) JOIN BOOKS
USING(isbn) JOIN BOOKAUTHOR
USING(isbn) JOIN AUTHOR
USING(authorid)
WHERE CUSTOMERS.FirstName = 'BECCA' and CUSTOMERS.LastName = 'NELSON';

fname	lname	title
ROBERT	ROBINSON	BIG BEAR AND LITTLE DOVE
WILLIAM	WHITE	HANDCRANKED COMPUTERS
LISA	WHITE	HANDCRANKED COMPUTERS
JACK	BAKER	PAINLESS CHILD-REARING
OSCAR	FIELDS	PAINLESS CHILD-REARING
ROBERT	ROBINSON	PAINLESS CHILD-REARING
JANICE	JONES	REVENGE OF MICKEY

7)
SELECT BOOKS.Title, ORDERS.Order_num, CUSTOMERS.State
FROM BOOKS LEFT JOIN ORDERITEMS
ON BOOKS.ISBN = ORDERITEMS.ISBN LEFT JOIN ORDERS
ON ORDERITEMS.Order_num = ORDERS.Order_num LEFT JOIN CUSTOMERS
ON ORDERS.Customer_num = CUSTOMERS.Customer_num;

Title	Order_num	State
HOW TO GET FASTER PIZZA	NULL	NULL
THE WOK WAY TO COOK	NULL	NULL
REVENGE OF MICKEY	1009	WA
REVENGE OF MICKEY	1012	MI
REVENGE OF MICKEY	1014	TX
REVENGE OF MICKEY	1019	GA
BODYBUILD IN 10 MINUTES A DAY	1003	FL
HANDCRANKED COMPUTERS	1012	MI
SHORTEST POEMS	1005	GA
PAINLESS CHILD-REARING	1001	GA
PAINLESS CHILD-REARING	1004	NJ
PAINLESS CHILD-REARING	1011	GA
PAINLESS CHILD-REARING	1012	MI
PAINLESS CHILD-REARING	1016	FL
COOKING WITH MUSHROOMS	1000	WA
COOKING WITH MUSHROOMS	1003	FL
COOKING WITH MUSHROOMS	1008	ID
COOKING WITH MUSHROOMS	1009	WA
COOKING WITH MUSHROOMS	1015	NJ
COOKING WITH MUSHROOMS	1018	FL
COOKING WITH MUSHROOMS	1020	WY
HOLY GRAIL OF ORACLE	1007	TX
BUILDING A CAR WITH TOOTHPI…	NULL	NULL
BIG BEAR AND LITTLE DOVE	1007	TX
BIG BEAR AND LITTLE DOVE	1012	MI
BIG BEAR AND LITTLE DOVE	1017	FL
DATABASE IMPLEMENTATION	1002	IL
DATABASE IMPLEMENTATION	1003	FL
DATABASE IMPLEMENTATION	1007	TX
DATABASE IMPLEMENTATION	1010	NJ
DATABASE IMPLEMENTATION	1013	WY
DATABASE IMPLEMENTATION	1018	FL
HOW TO MANAGE THE MANAGER	1001	GA
E-BUSINESS THE EASY WAY	1006	FL
E-BUSINESS THE EASY WAY	1007	TX

8)
SELECT COUNT(*)
FROM BOOKS
WHERE BOOKS.Retail >= 30;

COUNT(*)
8

9)
```
SELECT MAX(pubdate)
FROM BOOKS;
```

MAX(pubdate)
2006-11-11

10)
```
SELECT SUM((BOOKS.Retail - BOOKS.Cost)*ORDERITEMS.Quantity) AS 'Total Profit'
FROM CUSTOMERS JOIN ORDERS
USING(customer_num) JOIN ORDERITEMS
USING(order_num) JOIN BOOKS
USING(isbn)
WHERE CUSTOMERS.Customer_num = 1017;
```

Total Profit
59.78

11)
```
SELECT MIN(retail)
FROM BOOKS;
```

MIN(retail)
8.95

12)
```
SELECT customer_num, COUNT(*)
FROM ORDERS
GROUP BY customer_num;
```

customer_num	COUNT(*)
1001	2
1003	2
1004	1
1005	2
1007	2
1008	1
1010	2
1011	1
1014	1
1015	1
1017	1
1018	2
1019	1
1020	2

13)
SELECT PUBLISHER.Name, BOOKS.Category, AVG(Retail)
FROM BOOKS JOIN PUBLISHER
USING(PubID)
WHERE BOOKS.Category IN(PUBLISHER.Name, BOOKS.Category)
AND (BOOKS.Retail > 50)
GROUP BY PUBLISHER.Name, BOOKS.Category;

Name	Category	AVG(Retail)
AMERICAN PUBLISHING	COMPUTER	65.950000
PUBLISH OUR WAY	CHILDREN	59.950000
PUBLISH OUR WAY	COMPUTER	54.500000
REED-N-RITE	FAMILY LIFE	89.950000

14)
SELECT CUSTOMERS.FirstName, CUSTOMERS.LastName, ORDERS.Order_num,
SUM(retail * quantity) AS Total
FROM CUSTOMERS JOIN ORDERS
USING(customer_num) JOIN ORDERITEMS
USING(order_num) JOIN BOOKS
USING(isbn)
WHERE CUSTOMERS.State = 'FL' OR CUSTOMERS.State = 'GA'
GROUP BY order_num desc
HAVING SUM(retail * quantity) > 80;

FirstName	LastName	Order_num	Total
LEILA	SMITH	1016	89.95
JAKE	LUCAS	1011	89.95
BONITA	MORALES	1003	106.85
JAKE	LUCAS	1001	121.90

15)
SELECT MAX(retail)
FROM BOOKS JOIN BOOKAUTHOR
USING(isbn) JOIN AUTHOR
USING(AuthorID)
WHERE AUTHOR.Fname = 'LISA'
AND AUTHOR.Lname = 'WHITE';

MAX(retail)
39.95