

Ethan Tuning
11/7/16
CSCD327
Lab#5

1.

```
1 SELECT Title, Retail
2 FROM BOOKS
3 WHERE Retail < (SELECT avg(Retail)
4                 FROM BOOKS)
```

Title	Retail
HOW TO GET FASTER PIZZA	29.95
THE WOK WAY TO COOK	28.75
REVENGE OF MICKEY	22.00
BODYBUILD IN 10 MINUTES A DAY	30.95
HANDCRANKED COMPUTERS	25.00
SHORTEST POEMS	39.95
COOKING WITH MUSHROOMS	19.95
BIG BEAR AND LITTLE DOVE	8.95
HOW TO MANAGE THE MANAGER	31.95

2.

```
1 SELECT Title, Cost, Category
2 FROM BOOKS
3 GROUP BY Category
4 HAVING Cost < (SELECT avg(Cost)
5               FROM BOOKS)
```

Title	Cost	Category
HOW TO MANAGE THE MANAGER	15.40	BUSINESS
HANDCRANKED COMPUTERS	21.80	COMPUTER
THE WOK WAY TO COOK	19.00	COOKING
REVENGE OF MICKEY	14.20	FAMILY LIFE
BODYBUILD IN 10 MINUTES A DAY	18.75	FITNESS
SHORTEST POEMS	21.85	LITERATURE
HOW TO GET FASTER PIZZA	17.85	SELF HELP

3.

```
1 SELECT Order_num
2 FROM ORDERS
3 WHERE ShipState = (SELECT ShipState
4                   FROM ORDERS
5                   WHERE Order_num = "1014")
```

Order_num
1,007
1,014

4.

```

1 SELECT Order_num, sum(Quantity * PaidEach) Total
2 FROM ORDERITEMS
3 GROUP BY Order_num
4 HAVING sum(Quantity * PaidEach) > (SELECT sum(Quantity * PaidEach)
5 FROM ORDERITEMS
6 WHERE Order_num = "1002")

```

Order_num	Total
1,001	117.40
1,004	170.90
1,007	335.85
1,012	166.40

5.

```

1 SELECT DISTINCT Title
2 FROM ORDERS NATURAL JOIN ORDERITEMS NATURAL JOIN BOOKS
3 WHERE ISBN NOT IN (SELECT ISBN
4 FROM ORDERS o JOIN ORDERITEMS oi
5 ON o.Order_num = oi.Order_num
6 WHERE o.Order_num = oi.Order_num AND o.Customer_num = "1007")

```

Title
BODYBUILD IN 10 MINUTES A DAY
HANDCRANKED COMPUTERS
SHORTEST POEMS
PAINLESS CHILD-REARING
COOKING WITH MUSHROOMS
HOW TO MANAGE THE MANAGER

6.

```

1 SELECT ShipCity, ShipState, (ShipDate - OrderDate) AS Shipping_Delay
2 FROM ORDERS
3 WHERE ShipDate - OrderDate = (SELECT MAX(ShipDate - OrderDate)
4 FROM ORDERS)

```

ShipCity	ShipState	Shipping_Delay
SEATTLE	WA	71.00

7.

```

1 SELECT DISTINCT Customer_num
2 FROM ORDERS NATURAL JOIN ORDERITEMS NATURAL JOIN BOOKS
3 WHERE Retail NOT IN (SELECT MIN(Retail)
4 FROM BOOKS)

```

Customer_num
1,005
1,017
1,007
1,018
1,001
1,010
1,020
1,003
1,004
1,008
1,011
1,019
1,014

8.

```
1 SELECT DISTINCT Customer_num
2 FROM ORDERS NATURAL JOIN ORDERITEMS
3 WHERE ISBN IN (SELECT ISBN
4                 FROM ORDERITEMS NATURAL JOIN BOOKAUTHOR NATURAL JOIN AUTHOR
5                 WHERE Lname = "AUSTIN" AND Fname = "JAMES")
```

Customer_num
1,001
1,007
1,011
1,014
1,019

9.

```
1 SELECT name
2 FROM instructor
3 WHERE salary = (SELECT MAX(salary)
4                 FROM instructor)
```

name
Einstein

10.

```
1 SELECT course_id, sec_id
2 FROM section
3 WHERE sec_id = (SELECT MAX(sec_id)
4                 FROM takes)
```

course_id	sec_id
CS-190	2
CS-319	2

11.

```
1 SELECT dept_name, MAX(salary)
2 FROM instructor
3 WHERE salary = (SELECT MIN(salary)
4                 FROM instructor)
```

dept_name	MAX(salary)
Music	40,000.00

12.

```
1 SELECT DISTINCT category_name
2 FROM categories
3 WHERE categories.category_id IN (SELECT products.category_id
4                                 FROM products)
```

category_name
Basses
Drums
Guitars

13.

1	SELECT product_name, list_price
2	FROM products
3	WHERE list_price > (SELECT AVG(list_price)
4	FROM products)
	product_name list_price
▶	Gibson Les Paul 1,199.00
	Gibson SG 2,517.00

14.

1	SELECT category_name
2	FROM categories
3	WHERE NOT EXISTS(SELECT category_id
4	FROM products
5	WHERE categories.category_id = products.category_id)
	category_name
▶	Keyboards

15.

1	SELECT email_address, order_id, order_date
2	FROM customers AS cust NATURAL JOIN orders
3	WHERE order_date = (SELECT MIN(order_date)
4	FROM orders AS ord
5	WHERE cust.customer_id = ord.customer_id)
	email_address order_id order_date
▶	allan.sherwood@yahoo.com 1 03/28/2012 09:40:28
	barryz@gmail.com 2 03/28/2012 11:23:20
	christineb@solarone.com 4 03/30/2012 15:22:31
	david.goldstein@hotmail.com 5 03/31/2012 05:43:11
	erinv@gmail.com 6 03/31/2012 18:37:22
	frankwilson@sbcglobal.net 7 04/01/2012 23:11:12
	gary_hernandez@yahoo.com 8 04/02/2012 11:26:38