

## CSCD327 – Lab5

1)

```
select BOOKS.Title, BOOKS.Retail
from BOOKS
where BOOKS.Retail < (select avg(BOOKS.Retail)
                      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)

```
select a.Title, b.Category, a.Cost
from BOOKS a, (select BOOKS.Category, avg(BOOKS.Cost) averagecost
               from BOOKS
               group by BOOKS.Category) b
where a.Category = b.Category
and a.Cost < b.averagecost;
```

Title	Category	Cost
REVENGE OF MICKEY	FAMILY LIFE	14.20
HANDCRANKED COMPUTERS	COMPUTER	21.80
COOKING WITH MUSHROOMS	COOKING	12.50
BIG BEAR AND LITTLE DOVE	CHILDREN	5.32
DATABASE IMPLEMENTATION	COMPUTER	31.40

3)

```
select ORDERS.Order_num
from ORDERS
where ORDERS.ShipState = (select ORDERS.ShipState
                          from ORDERS
                          where ORDERS.Order_num = 1014);
```

Order_num
1007
1014

4)

```

select ORDERITEMS.Order_num, sum(ORDERITEMS.Quantity * ORDERITEMS.PaidEach)
as total_order_amount
from ORDERITEMS
group by ORDERITEMS.Order_num
having sum(ORDERITEMS.Quantity * ORDERITEMS.PaidEach) > (select
sum(ORDERITEMS.Quantity * ORDERITEMS.PaidEach)
from ORDERITEMS
where ORDERITEMS.Order_num = 1002);

```

Order_num	total_order_amount
1001	117.40
1004	170.90
1007	335.85
1012	166.40

5)

```

select BOOKS.Title
from BOOKS
where BOOKS.Category in(select distinct BOOKS.Category
                        from BOOKS join ORDERITEMS using(ISBN)
                        join ORDERS using(Order_num)
                        where ORDERS.Customer_num = 1007)
and ISBN not in(select ISBN
from ORDERS join ORDERITEMS
using(Order_num)
where ORDERS.Customer_num = 1007);

```

Title
HANDCRANKED COMPUTERS
PAINLESS CHILD-REARING
BUILDING A CAR WITH TOOTHPICKS

6)

```

select ORDERS.ShipCity, ORDERS.ShipState
from ORDERS
where ORDERS.ShipDate - ORDERS.OrderDate = (select MAX(datediff(ORDERS.ShipDate,
ORDERS.OrderDate))
from ORDERS);

```

ShipCity	ShipState
TRENTON	NJ

7)

```

select CUSTOMERS.Customer_num
from CUSTOMERS join ORDERS using(Customer_num)
join ORDERITEMS using(Order_num)
join BOOKS using(ISBN)
where retail = (select min(retail)
                from BOOKS);

```

Customer_num
1007
1017
1015

8)

```

select count(distinct ORDERS.Customer_num)
from ORDERS join ORDERITEMS using(Order_num)
where ISBN in(select ISBN
               from ORDERITEMS join BOOKAUTHOR using(ISBN)
               join AUTHOR using(Authorid)
               where fname = 'JAMES' and lname = 'AUSTIN');

```

count(distinct ORDERS.Customer_num)
5

9)

```

select product_name, list_price
from products
where list_price > (select avg(list_price)
                   from products
                   where list_price > 0)
order by list_price desc;

```

product_name	list_price
Gibson SG	2517.00
Gibson Les Paul	1199.00

10)

```

select category_name
from categories
where not exists(select 1
                 from products p
                 where p.category_id = categories.category_id);

```

category_name
Keyboards

11)

```

select email_address, order_id, order_date
from customers T join orders
where order_id = (select min(order_id)
                  from orders as S
                  where T.customer_id = S.customer_id);

```

email_address	order_id	order_date
allan.sherwood@yahoo.com	1	2012-03-28 09:40:28
barryz@gmail.com	2	2012-03-28 11:23:20
christineb@solarone.com	4	2012-03-30 15:22:31
david.goldstein@hotmail.com	5	2012-03-31 05:43:11
erinv@gmail.com	6	2012-03-31 18:37:22
frankwilson@sbcglobal.net	7	2012-04-01 23:11:12
gary_hernandez@yahoo.com	8	2012-04-02 11:26:38

12)

```

select id, name, salary
from instructor
where salary = (select max(salary)
                from instructor);

```

id	name	salary
22222	Einstein	95000.00

13)

```

select id, name, salary
from instructor
where salary = (select max(salary)
                from instructor
                where salary < (select max(salary)
                                from instructor));

```

id	name	salary
83821	Brandt	92000.00

14)

```
select id, name, count(distinct course_id) as cnt
from instructor join teaches using(id)
group by id
having
    count(distinct course_id) =
        (select max(a.num)
         from (select count(distinct course_id) as num
              from teaches
              group by id) as a);
```

id	name	cnt
10101	Srinivasan	3