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CSCD 327

Lab 5

1) Find the number of books which have a retail price of $30.00or more.

```
1
2 •   SELECT COUNT(*) as Number_of_Books
3     FROM
4         BOOKS
5     WHERE
6         Retail > 30
7     ;
```

	Number_of_Books
▶	8

2) Display the most recent publication date among all books owned by the bookstore.

```
SELECT MAX(PubDate) as Most_Recent_Date
FROM
    BOOKS
;
```

	Most_Recent_Date
▶	2006-11-11

3) Determine the total profit generated by sales to customer 1017. Note: total profit= sum((retail-cost)*quantity))

```
•   SELECT SUM((Retail - Cost) * Quantity) as Total_Profit
    FROM
        ORDERS o
    JOIN
        ORDERITEMS oi
    ON
        o.Order_num = oi.Order_num
    JOIN
        BOOKS b
    ON
        oi.isbn = b.ISBN
    WHERE
        Customer_num = 1017
    ;
```

	Total_Profit
▶	59.78

4) List the retail price of the least expensive book in the CHILDREN category.

```
SELECT MIN(Retail) as Least_Expensive_Retail
FROM
    BOOKS
WHERE
    Category = 'CHILDREN'
;
```

	Least_Expensive_Retail
▶	8.95

5) Determine how many orders have been placed by each customer. Do not include the customers who haven't placed any order. Display the customer number, and the number of orders placed by the customer.

```
SELECT
    c.Customer_num, COUNT(o.Order_num) as Number_of_Orders
FROM
    CUSTOMERS c, ORDERS o
WHERE
    c.Customer_num = o.Customer_num
GROUP BY
    o.Customer_num
;
```

	Customer_num	Number_of_Orders
▶	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

6) Determine the average retail price of books by publisher and category(i.e., group by publisher name and book category). Include only the (publisher, category) pair when the corresponding average retail price is more than $50.

```
SELECT
    p.Name, b.Category, AVG(Retail)
FROM
    BOOKS b
JOIN
    PUBLISHER p
ON
    b.PubID = p.PubID
GROUP BY
    p.Name, b.Category
HAVING
    AVG(Retail) > 50
;
```

Name	Category	AVG(Retail)
PUBLISH OUR WAY	CHILDREN	59.950000
PUBLISH OUR WAY	COMPUTER	54.500000
AMERICAN PUBLISHING	COMPUTER	52.300000
REED-N-RITE	FAMILY LIFE	89.950000

7) List the customers living in GA or FL who have placed an order totaling more than $80(hint: use “group by order_num having ...”). List the name of the customer, the order number, and the corresponding order total. Sort the result by the order total in ascending order. Note: Order total= sum(retail*quantity).

```
SELECT
    FirstName, LastName, o.Order_num, SUM(Retail * Quantity) as total
FROM
    BOOKS b, CUSTOMERS c, ORDERS o, ORDERITEMS oi
WHERE
    o.Customer_num = c.Customer_num
AND
    o.Order_num = oi.Order_num
AND
    b.ISBN = oi.ISBN
AND
    c.State in ('GA', 'FL')
GROUP BY
    FirstName, LastName, o.Order_num
HAVING
    total > 80
ORDER BY
    total
;
```

	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

8) What's the retail price of the most expensive book written by LISAWHITE.

```
SELECT
    MAX(Retail) as Most_Expensive
FROM
    BOOKS b
JOIN
    BOOKAUTHOR ba
ON
    b.ISBN = ba.ISBN
JOIN
    AUTHOR a
ON
    a.AuthorID = ba.AuthorID
WHERE
    a.Lname = 'WHITE'
AND
    a.Fname = 'LISA'
;
```

	Most_Expensive
▶	39.95

9) For each book author, find the total number of books that have been ordered. For those authors who don't have any books being ordered, use the number of 0 to fill in. List the result in descending order based on these numbers.

```
SELECT
    a.AuthorID, a.Lname, a.Fname, IFNULL(SUM(Quantity), 0) as Total_Order_Numbers
FROM AUTHOR a
    LEFT JOIN BOOKAUTHOR ba ON a.AuthorID = ba.AuthorID
    LEFT JOIN ORDERITEMS oi ON ba.ISBN = oi.ISBN
    LEFT JOIN ORDERS o ON oi.Order_num = o.Order_num
GROUP BY
    a.AuthorID
ORDER BY
    Total_Order_Numbers DESC
;
```

AuthorID	Lname	Fname	Total_Order_Numbers
B100	BAKER	JACK	14
A100	AUSTIN	JAMES	10
R100	ROBINSON	ROBERT	10
A105	ADAMS	JUAN	7
J100	JONES	JANICE	7
P105	PETERSON	TINA	7
F100	FIELDS	OSCAR	6
W100	WHITE	WILLIAM	3
W105	WHITE	LISA	3
P100	PORTER	LISA	1
S100	SMITH	SAM	1
K100	KZOCHSKY	TAMARA	0
M100	MARTINEZ	SHEILA	0
W110	WILKINSON	ANTHONY	0

10) Find the number of customers in each of the states that have a letter 'A' in State's name. Only list those states that have at least two customers.

```
SELECT
    State, COUNT(*) as Number_of_Customers
FROM
    CUSTOMERS c, ORDERS o
WHERE
    State LIKE '%A%'
AND
    c.Customer_num = o.Customer_num
GROUP BY
    State
;
```

State	Number_of_Customers
WA	2
GA	4

Unless I'm mistaken, I don't think my data table had orders from CA