

Nathan Hamilton
CSCD 327-01
Lab 5

1. SELECT Title, Retail
 FROM BOOKS
 WHERE Retail < (SELECT avg(Retail)
 FROM BOOKS);

 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 Title, Category, Cost
 FROM BOOKS b1
 WHERE Cost < (SELECT avg(Cost)
 FROM BOOKS b2
 GROUP BY Category
 HAVING b1.Category = b2.Category);

 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 Order_num
 FROM ORDERS
 WHERE ShipState = (SELECT ShipState
 FROM ORDERS
 WHERE Order_num = 1014);

 1007
 1014

4. SELECT Order_num, sum(Quantity * PaidEach)
 FROM ORDERITEMS
 GROUP BY Order_num
 Having sum(Quantity * PaidEach) > (SELECT sum(Quantity * PaidEach)
 FROM ORDERITEMS
 WHERE Order_num = 1002);

1001 117.40
 1004 170.90
 1007 335.85
 1012 166.40

5. SELECT Title
 FROM BOOKS
 WHERE Category IN (SELECT Category
 FROM BOOKS NATURAL JOIN ORDERITEMS NATURAL JOIN ORDERS
 WHERE Customer_num = 1007)
 AND Title NOT IN (SELECT Title
 FROM BOOKS NATURAL JOIN ORDERITEMS NATURAL JOIN ORDERS
 WHERE Customer_num = 1007);

HANDCRANKED COMPUTERS
 PAINLESS CHILD-REARING
 BUILDING A CAR WITH TOOTHPICKS

6. SELECT ShipCity, ShipState
 FROM ORDERS
 WHERE datediff(ShipDate, OrderDate) = (SELECT max(datediff(ShipDate, OrderDate))
 FROM ORDERS);

TRENTON NJ

7. SELECT Customer_num
 FROM ORDERS NATURAL JOIN ORDERITEMS NATURAL JOIN BOOKS
 WHERE Retail = (SELECT min(retail)
 FROM BOOKS);

1007
 1017
 1015

8. SELECT count(DISTINCT Customer_num)
 FROM (SELECT Customer_num
 FROM ORDERS NATURAL JOIN ORDERITEMS NATURAL JOIN BOOKS NATURAL JOIN
 BOOKAUTHOR NATURAL JOIN AUTHOR
 WHERE Fname = 'JAMES' AND Lname = 'AUSTIN') TEMP;

9. SELECT product_name, list_price
 FROM products
 WHERE list_price > (SELECT avg(list_price)
 FROM products)
 ORDER BY list_price DESC;
 Gibson SG 2517.00
 Gibson Les Paul 1199.00
10. SELECT category_name
 FROM categories c1
 WHERE NOT EXISTS (SELECT *
 FROM categories NATURAL JOIN products c2
 WHERE c1.category_id = c2.category_id);
 Keyboards
11. SELECT email_address, order_id, order_date
 FROM customers NATURAL JOIN orders t1
 WHERE order_date = (SELECT min(order_date)
 FROM customers NATURAL JOIN orders t2
 WHERE t1.customer_id = t2.customer_id);
 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);
 22222 Einstein 95000.00
13. SELECT i1.ID, i1.name, i1.salary
 FROM instructor i1
 WHERE i1.salary = (SELECT max(i2.salary)
 FROM instructor i2
 WHERE i2.salary < (SELECT max(i3.salary)
 FROM instructor i3));
 83821 Brandt 92000.00
14. SELECT ID, name, count(DISTINCT course_id)
 FROM instructor NATURAL JOIN teaches t1

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GROUP BY t1.ID
HAVING count(DISTINCT course_id) >= ALL (SELECT count(DISTINCT course_id)
                                           FROM instructor NATURAL JOIN teaches t2
                                           GROUP BY t2.ID);
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