

Lab 5

1. SELECT title, retail
FROM BOOKS
WHERE retail < (SELECT avg(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 title, cost, category, (SELECT avg(cost) FROM BOOKS WHERE category =
B1.category) average
FROM BOOKS B1
GROUP BY title, category
HAVING cost < (SELECT avg(cost) FROM BOOKS WHERE BOOKS.category =
B1.category);

title	cost	category	average
BIG BEAR AND LITTLE DOVE	5.32	CHILDREN	21.560000
COOKING WITH MUSHROOMS	12.50	COOKING	15.750000

DATABASE IMPLEMENTATION	31.40	COMPUTER	34.587500
HANDCRANKED COMPUTERS	21.80	COMPUTER	34.587500
REVENGE OF MICKEY	14.20	FAMILY LIFE	31.100000

3. SELECT Order_num
FROM ORDERS
WHERE Order_num != '1014' and ShipState = (SELECT ShipState FROM ORDERS
WHERE Order_num = '1014') ;

Order_num
1007

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

Order_num	Order_Total
1001	117.40
1004	170.90
1007	335.85
1012	166.40

5. SELECT distinct title
FROM BOOKS
WHERE category IN (SELECT category FROM (ORDERITEMS natural join ORDERS)
natural join BOOKS WHERE customer_num = '1007') and ISBN NOT IN (SELECT ISBN
FROM ORDERITEMS natural join ORDERS WHERE customer_num = '1007')

title
HANDCRANKED COMPUTERS

PAINLESS CHILD-REARING
BUILDING A CAR WITH TOOTHPICKS

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

Order_num	ShipCity	ShipState
1004	TRENTON	NJ

7. SELECT customer_num
FROM ORDERS natural join ORDERITEMS
WHERE ISBN = (SELECT ISBN FROM BOOKS WHERE retail = (SELECT min(retail) FROM
BOOKS));

customer_num
1007
1017
1015

8. SELECT count(distinct Customer_num)
FROM ORDERS natural join ORDERITEMS
WHERE ISBN IN (SELECT ISBN FROM BOOKAUTHOR natural join AUTHOR WHERE
Lname = 'AUSTIN' and Fname = 'JAMES') ;

count(distinct Customer_num)
5

9. SELECT ID, name, salary
FROM instructor
WHERE salary = (SELECT max(salary) FROM instructor) ;

ID	name	salary
22222	Einstein	95000.00

10. SELECT distinct course_id, sec_id
FROM takes
WHERE semester = 'Spring' and year = '2010'
GROUP BY course_id, sec_id HAVING count(ID) = (SELECT max(enrollment) FROM
(SELECT count(ID) enrollment FROM takes WHERE semester = 'Spring' and year = '2010'
GROUP BY course_id, sec_id) temp) ;

course_id	sec_id
CS-315	1

11. SELECT name, salary, dept_name
FROM (SELECT name, max(salary) salary, dept_name
FROM instructor
GROUP BY dept_name) temp WHERE salary = (SELECT min(salary) FROM (SELECT
name, max(salary) salary, dept_name FROM instructor GROUP BY dept_name) temp) ;

name	salary	dept_name
Mozart	40000.00	Music

12. SELECT product_name, list_price
FROM products
WHERE list_price > (SELECT avg(list_price) FROM products)
ORDER BY list_price DESC;

product_name	list_price
Gibson SG	2517.00
Gibson Les Paul	1199.00

13. SELECT category_name
 FROM categories
 WHERE NOT EXISTS (SELECT category_id FROM products WHERE
 categories.category_id = products.category_id);

category_name
Keyboards

14. SELECT email_address, order_id, sum((item_price - discount_amount) *quantity)
 order_amount
 FROM products join order_items using(product_id) join orders using(order_id) join
 customers using(customer_id)
 GROUP BY email_address, order_id;

email_address	order_id	order_amount
allan.sherwood@yahoo.com	1	839.30
allan.sherwood@yahoo.com	3	1461.31
barryz@gmail.com	2	303.79
christineb@solarone.com	4	1678.60
david.goldstein@hotmail.com	5	299.00
david.goldstein@hotmail.com	9	489.30
erinv@gmail.com	6	299.00
frankwilson@sbcglobal.net	7	1539.28
gary_hernandez@yahoo.com	8	679.99

SELECT email_address, max(order_amount)
 FROM (SELECT email_address, order_id, sum((item_price - discount_amount) *quantity)
 order_amount FROM products join order_items using(product_id) join orders using(order_id) join
 customers using(customer_id) GROUP BY email_address, order_id) temp
 GROUP BY email_address;

email_address	max(order_amount)
allan.sherwood@yahoo.com	1461.31
barryz@gmail.com	303.79
christineb@solarone.com	1678.60
david.goldstein@hotmail.com	489.30
erinv@gmail.com	299.00
frankwilson@sbcglobal.net	1539.28
gary_hernandez@yahoo.com	679.99

15. SELECT product_name, discount_percent
FROM products
GROUP BY discount_percent
HAVING count(product_id) = 1;

product_name	discount_percent
Washburn D10S	0.00
Tama 5-Piece Drum Set with Cymbals	15.00
Hofner Icon	25.00
Yamaha FG700S	38.00
Rodriguez Caballero 11	39.00
Gibson SG	52.00