SQL Practice 1

One table, Aggregation, Group By 24 Queries

Link: <u>https://www.w3resource.com/sql-exercises/</u>

salesman				customer				
salesman_id	name	city	commission	customer_id	customer_name	city	grade	salesman_id
5001	James Hoog	New York	0.15	3002	Nick Rimando	New York	100	5001
5002	Nail Knite	Paris	0.13	3005	Graham Zusi	California	200	5002
5005	Pit Alex	London	0.11	3001	Brad Guzan	London		
5006	Mc Lyon	Paris	0.14	3004	Fabian Johns	Paris	300	5006
5003	Lauson Hen		0.12	3007	Brad Davis	New York	200	5001
5007	Paul Adam	Rome	0.13	3009	Geoff Camero	Berlin	100	
				3008	Julian Green	London	300	5002
				3003	Jozy Altidor	Moncow	200	5007

order

order no	purch amt	order date	customer id	salesman id
70001	150.5	2016-10-05	3005	5002
70009	270.65	2016-09-10	3001	
70002	65.26	2016-10-05	3002	5001
70004	110.5	2016-08-17	3009	
70007	948.5	2016-09-10	3005	5002
70005	2400.6	2016-07-27	3007	5001
70008	5760	2016-09-10	3002	5001
70010	1983.43	2016-10-10	3004	5006
70003	2480.4	2016-10-10	3009	
70012	250.45	2016-06-27	3008	5002
70011	75.29	2016-08-17	3003	5007



• Display name and commission of all the salesmen.

• Display name and commission for all the salesmen.

name	<u>commission</u>
James Hoog	0.15
Nail Knite	0.13
Pit Alex	0.11
Mc Lyon	0.14
Paul Adam	0.13
Lauson Hen	0.12

SELECT name, commission **FROM** salesman;

salesman_id	name	city	commission
5001	James Hoog	New York	0.15
5002	Nail Knite	Paris	0.13
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5003	Lauson Hense		0.12
5007	Paul Adam	Rome	0.13
	T <mark>name,comm</mark> salesman;	ission	
		city	commission
FROM	salesman;		commission 0.15
FROM salesman_id	salesman; name	city	
FROM salesman_id 5001	salesman; name James Hoog	city New York	0.15
FROM salesman_id 5001 5002	salesman; name James Hoog Nail Knite	city New York Paris	0.15 0.13
FROM salesman_id 5001 5002 5005	salesman; name James Hoog Nail Knite Pit Alex	city New York Paris London	0.15 0.13 0.11
FROM salesman_id 5001 5002 5005 5006	salesman; name James Hoog Nail Knite Pit Alex Mc Lyon	city New York Paris London	0.13 0.11 0.14

• Retrieve salesman id of all salesmen from orders table without any repeats.

• Retrieve salesman id of all salesmen from orders table without any repeats.

salesman_id
5002
5003
5006
5001
5005
5007

SELECT DISTINCT salesman_id FROM orders;

[ord_no	purch_amt	ord_date	customer_id	salesman_id	
[70001	150.50	2012-10-05	3005	5002	1
	70009	270.65	2012-09-10	3001	5005	
1	70002	65.26	2012-10-05	3002	5001	X
	70004	110.50	2012-08-17	3009	5003	
/	70007	948.50	2012-09-10	3005	5002	\mathbf{Y}
-	70005	2400.60	2012-07-27	3007	5001	
	70008	5760.00	2012-09-10	3002	5001	A
	70010	1983.43	2012-10-10	3004	5006	1
$\left[\right]$	70003	2480.40	2012-10-10	3009	5003	
	70012	250.45	2012-06-27	3008	5002	
+	70011	75.29	2012-08-17	3003	5007	
	70013	3045.60	2012-04-25	3002	5001	
	R		l orders;	T salesman_id		
			salesm	an_id		
			> 5006			
			5002			
			-			
			5005			
			5003 > 5007			
			5007			

• Display names and city of salesman, who belongs to the city of Paris.

• Display names and city of salesman, who belongs to the city of Paris.

name	city
Nail Knite	Paris
Mc Lyon	Paris

SELECT name,city FROM salesman WHERE city='Paris';

	salesman_id	name	city	commission
	5001	James Hoog	New York	0.15
	5002	Nail Knite	Paris	0.13
	5005	Pit Alex	London	0.11
1	5006	Mc Lyon	Paris	0.14
	5003	Lauson Hense		0.12
	5007	Paul Adam	Rome	0.13

SELECT name, city FROM salesman

WHERE city ='Paris';

salesman_id	name	city	commission	
5001	James Hoog	New York	0.15	
5002	Nail Knite	Paris	0.13	
5005	Pit Alex	London	0.11	
5006	Mc Lyon	Paris	0.14	
5003	Lauson Hense		0.12	1
5007	Paul Adam	Rome	0.13	1

• Display all the information for those customers with a grade of 200.

customer_id	cust_name	city	grade	salesman_id
3007	Brad Davis	New York	200	5001
3005	Graham Zusi	California	200	5002
3003	Jozy Altidor	Moscow	200	5007

SELECT * FROM customer WHERE grade = 200;

	customer_id	cust_name	city	grade	salesman_id
	3002	Nick Rimando	New York	100	5001
7	3005	Graham Zusi	California	200	5002
	3004	Fabian Johnson	Paris	300	5006
	3007	Brad Davis	New York	200	5001
	3009	Geoff Cameron	Berlin	100	5003
	3008	Julian Green	London	300	5002
	3003	Jozy Altidore	Moscow	200	5007
	3001	Brad Guzan	London		5005

SELECT* FROM customer WHERE grade =200;

customer_id	cust_name	city	grade	salesman_id
3002	Nick Rimando	New York	100	5001
3005	Graham Zusi	California	200	5002
3004	Fabian Johnson	Paris	300	5006
3007	Brad Davis	New York	200	5001
3009	Geoff Cameron	Berlin	100	5003
3008	Julian Green	London	300	5002
3003	Jozy Altidore	Moscow	200	5007
3001	Brad Guzan	London		5005

 Display the order number, order date and the purchase amount for order(s) which will be delivered by the salesman with ID 5001.

ord_no	ord_date	purch_amt
70002	2012-10-05	65.26
70005	2012-07-27	2400.60
70008	2012-09-10	5760.00
70013	2012-04-25	3045.60

SELECT ord_no, ord_date, purch_amt
FROM orders
WHERE salesman_id = 5001;

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.50	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.50	2012-08-17	3009	5003
70007	948.50	2012-09-10	3005	5002
70005	2400.60	2012-07-27	3007	5001
70008	5760.00	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.40	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.60	2012-04-25	3002	5001

SELECT ord_no, ord_date, purch_amt FROM orders WHERE salesman_id =5001;

ord no	ord_date	purch_amt
ord_no	oru_uale	purch_am
70001	2012-10-05	150.50
70009	2012-09-10	270.65
70002	2012-10-05	65.26
70004	2012-08-17	110.50
70007	2012-09-10	948.50
70005	2012-07-27	2400.60
70008	2012-09-10	5760.00
70010	2012-10-10	1983.43
70003	2012-10-10	2480.40
70012	2012-06-27	250.45
70011	2012-08-17	75.29
70013	2012-04-25	3045.60

Query 6 (table: nobel_win)

• Show the winner of the 1971 prize for Literature.



SELECT winner FROM nobel_win WHERE year = 1971 AND subject = 'Literature';

• Show all the details of the winners with first name Louis.

yearsubjectwinnercountrycategory1970PhysicsLouis NeelFranceScientist

SELECT * FROM nobel_win WHERE winner LIKE 'Louis%';

• Show all the winners in Physics for 1970 together with the winner of Economics for 1971.

year	subject	winner	country	category
1970	Physics	Hannes Alfven	Sweden	Scientist
1970	Physics	Louis Neel	France	Scientist
1971	Economics	Simon Kuznets	Russia	Economist

```
SELECT *
FROM nobel_win
WHERE (subject = 'Physics' AND year = 1970)
UNION
(SELECT *
FROM nobel_win
WHERE (subject = 'Economics' AND year = 1971)
);
```

• Show all the winners of Nobel prize in the year 1970 except the subject Physiology and Economics.

year	subject	winner	country	category
1970	Physics	Hannes Alfven	Sweden	Scientist
1970	Physics	Louis Neel	France	Scientist
1970	Chemistry	Luis Federico Leloir	France	Scientist
1970	Literature	Aleksandr Solzhenitsyn	Russia	Linguist

SELECT * FROM nobel_win WHERE year = 1970 AND subject NOT IN ('Physiology','Economics');

• Find all the details of the Nobel winners for the subject not started with the letter 'P' and arranged the list as the most recent comes first, then by name in order.

year	subject	winner	country	category	
1994	Literature	Kenzaburo Oe	Japan	Linguist	
1994	Economics	Reinhard Selten	Germany	Economist	SE
1987	Chemistry	Donald J. Cram	USA	Scientist	FR
1987	Chemistry	Jean-Marie Lehn	France	Scientist	W
1987	Literature	Joseph Brodsky	Russia	Linguist	OF
1987	Economics	Robert Solow	USA	Economist	•
1971	Chemistry	Gerhard Herzberg	Germany	Scientist	
1971	Literature	Pablo Neruda	Chile	Linguist	
1971	Economics	Simon Kuznets	Russia	Economist	
1970	Literature	Aleksandr Solzhenitsyn	Russia	Linguist	
1970	Chemistry	Luis Federico Leloir	France	Scientist	
1970	Economics	Paul Samuelson	USA	Economist	

SELECT * FROM nobel_win WHERE subject NOT LIKE 'P%' ORDER BY year DESC, winner;

Query 11 (table: item_mast)

• Find the name and price of the cheapest item(s).

pro_name	pro_price
ZIP drive	250.00
Mouse	250.00

Query 12 (table: customer)

• Display all the customers, who are either belongs to the city New York or not had a grade above 100.

customer_id	cust_name	city	grade	salesman_id
3002	Nick Rimando	New York	100	5001
3007	Brad Davis	New York	200	5001
3009	Geoff Cameron	Berlin	100	5003

SELECT * FROM customer WHERE city = 'New York' OR NOT grade > 100;

Query 13 (table: salesman)

• Find those salesmen with all information who gets the commission within a range of 0.12 and 0.14.

SELECT salesman_id, name, city, commission
FROM salesman
WHERE (commission > 0.10 AND commission < 0.12);</pre>

SELECT salesman_id, name, city, commission FROM salesman WHERE commission between 0.10 AND 0.12;

	salesman_i	id name		city	commissior	1
	5001	James	Hoog	New York	0.15	6
	5002	Nail Kı	nite	Paris	0.13	
	5005	Pit Ale	x	London	0.11	
7	5006	Mc Lyo	on	Paris	0.14	
['	5003	Lauso	n Hense		0.12	
	5007	Paul A	dam	Rome	0.13	
	FROM WHEF	T salesmar salesman RE (commis commission	ssion > (nmission	
sales	sman_id	name	city	com	mission	K
5005		Pit Alex	Londo	on 0.11		

Query 14 (table: customer)

• Find all those customers with all information whose names are ending with the letter 'n'.

SELECT * FROM customer WHERE cust_name LIKE '%n';

						1
	customer_id	cust_name	city	grade	salesman_id	
	3002	Nick Rimando	New York	100	5001	
	3005	Graham Zusi	canfornia	200	5002	
	3004	Fabian Johnson	Paris	300	5006	
	3007	Brad Davis	TNEW York	200	5001	
1	3009	Geoff Cameron	n lin	100	5003	
/	3008	Julian Green	London	300	5002	
	3003	Jozy Altidore	Moscow	200	5007	
	3001	Brad Guzan	London		5005	
	WHER	T customer E cust_name LIK	E '%n';			
-	customer_id	cust_name	city	grade	salesman_id	1
	3004	Fabian Johnson	Paris	300	5006	
	3009	Geoff Cameron	Berlin	100	5003	
	3008	Julian Green	London	300	5002	
	3001	Brad Guzan	London		5005	

Query 15 (table: salesmen)

• Find those salesmen with all information whose name containing the 1st character is 'N' and the 4th character is 'l' and rests may be any character.

SELECT * FROM salesman WHERE name LIKE 'N__1%';

	salesman_id	name	city	commission]
	5001 Nail	James Hoog	New York	0.15	1
4	5002	Nail Knite	Paris	0.13	1
1	5005	Pit Alex	London	0.11	1
()	5006	Mc Lyon	Paris	0.14	1
	5003	Lauson Hense		0.12	
	5007	Paul Adam	Rome	0.13	
	SELECT* FROM sales	man ne LIKE 'N 19	%':	_	
			•,		
	salesman_id	name	city o	commission	K
	5002	Nail Knite	Paris 0	.13	

Query 16 (table: customer)

• Find that customer with all information who does not get any grade except NULL.

SELECT * FROM customer WHERE grade IS NULL;

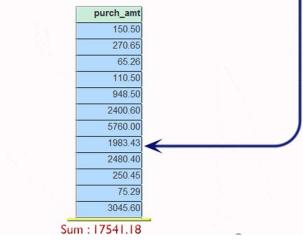
customer_id	cust_name	city	grade	salesman_id
3002	Nick Rimando	New York	100	5001
3005	Graham Zusi	California	200	5002
3004	Fabian Johnson	Paris	300	5006
3007	Brad Davis	New York	200	5001
3009	Geoff Cameron	Berlin	100	5003
3008	Julian Green	London	300	5002
3003	Jozy Altidore	Moscow	200	5007
3001	Brad Guzan	London		5005
<u> </u>	*		-	
SELECT FROM cu WHERE		;		
FROM cu	istomer grade IS NULL		ırade	salesman_id

Query 17 (table: orders)

• Find the total purchase amount of all orders.

SELECT SUM (purch_amt) FROM orders;

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.50	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.50	2012-08-17	3009	5003
70007	948.50	2012-09-10	3005	5002
70005	2400.60	2012-07-27	3007	5001
70008	5760.00	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.40	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.60	2012-04-25	3002	5001
	ECT SUM (p M orders ;	urch_amt)		
		purch_	-	
		100000	0.50	
		27	0.65	
			5.26	



Query 18 (table: orders)

• Find the number of salesman currently listing for all of their customers.

SELECT COUNT (salesman_id) **FROM** orders;

SELECT COUNT (DISTINCT salesman_id) **FROM** orders;

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.50	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.50	2012-08-17	3009	5003
70007	948.50	2012-09-10	3005	5002
70005	2400.60	2012-07-27	3007	5001
70008	5760.00	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.40	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.60	2012-04-25	3002	5001
-	LECT COU OM orders		INCT salesma	an_id)
		salesr 5002 5005 5001 5003 5006	nan_id	

Count:6

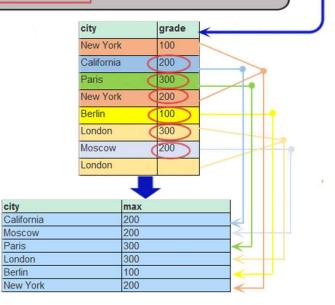
Query 19 (table: customer)

• Find the highest grade for each of the cities of the customers.

SELECT city, MAX(grade) FROM customer GROUP BY city;

customer_id	cust_name	city	grade	salesman_id
3002	Nick Rimando	New York	100	5001
3005	Graham Zusi	California	200	5002
3004	Fabian Johnson	Paris	300	5006
3007	Brad Davis	New York	200	5001
3009	Geoff Cameron	Berlin	100	5003
3008	Julian Green	London	300	5002
3003	Jozy Altidore	Moscow	200	5007
3001	Brad Guzan	London		5005

SELECT city, MAX(grade) FROM customer GROUP BY city ;



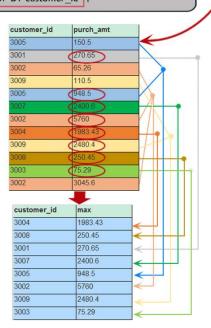
Query 20 (table: orders)

• Find the highest purchase amount ordered by the each customer with their ID and highest purchase amount.

SELECT customer_id, MAX(purch_amt)
FROM orders
GROUP BY customer_id;

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.50	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.50	2012-08-17	3009	5003
70007	948.50	2012-09-10	3005	5002
70005	2400.60	2012-07-27	3007	5001
70008	5760.00	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.40	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.60	2012-04-25	3002	5001

FROM orders GROUP BY customer id ;



Query 21 (table: orders)

• Find the highest purchase amount ordered by the each customer on a particular date with their ID, order date and highest purchase amount.

SELECT customer_id, ord_date, MAX(purch_amt)
FROM orders
GROUP BY customer_id, ord_date;

ł	salesman_ic	customer_id	ord_date	purch_amt	ord_no
)2	500	3005	2012-10-05	150.50	70001
)5	500	3001	2012-09-10	270.65	70009
)1	500	3002	2012-10-05	65.26	70002
)3	500	3009	2012-08-17	110.50	70004
)2	500	3005	2012-09-10	948.50	70007
)1	500	3007	2012-07-27	2400.60	70005
)1	500	3002	2012-09-10	5760.00	70008
)(500	3004	2012-10-10	1983.43	70010
)3	500	3009	2012-10-10	2480.40	70003
)2	500	3008	2012-06-27	250.45	70012
)7	500	3003	2012-08-17	75.29	70011
)1	500	3002	2012-04-25	3045.60	70013

SELECT customer_id, ord_date, MAX(purch_amt) FROM orders GROUP BY customer_id, ord_date;

customer_id	ord_date	max
3009	2012-10-10	2480.4
3007	2012-07-27	2400.6
3005	2012-09-10	948.5
3002	2012-09-10	5760
3002	2012-04-25	3045.6
3001	2012-09-10	270.65
3004	2012-10-10	1983.43
3003	2012-08-17	75.29
3005	2012-10-05	150.5
3008	2012-06-27	250.45
3002	2012-10-05	65.26
3009	2012-08-17	110.5

Query 22 (table: orders)

• Find the highest purchase amount on a date '2012-08-17' for each salesman with their ID.

SELECT salesman_id, MAX(purch_amt) FROM orders WHERE ord_date = '2012-08-17' GROUP BY salesman_id;

70001	paron_ann	ord_date	customer_i	salesma
	150.50	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65.26	2012-10-05	3002	5001
70004	110.50	2012-08-17	3009	5003
70007	948.50	2012-09-10	3005	5002
70005	2400.60	2012-07-27	3007	5001
70008	5760.00	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.40	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75.29	2012-08-17	3003	5007
70013	3045.60	2012-04-25	3002	5001
SELECT	1			
FROM ord WHERE o GROUP B	ord_date = '20 3Y salesman_ic	12-08-17' i;		
FROM ord WHERE of GROUP B	ord_date = '20 BY salesman_ic ate = '2012-08-17	12-08-17' i; GRO	UP BY salesm	
FROM ord WHERE o GROUP B	ord_date = '20 BY salesman_ic ate = '2012-08-17	12-08-17' i;		
FROM ord WHERE of GROUP B	ord_date = '20 BY salesman_ic ate = '2012-08-17 purch_am	12-08-17' i; GRO	UP BY salesm	salesm

110.50

75.29

5003 5007

Query 23 (table: orders)

• Find the highest purchase amount with their customer ID and order date, for only those customers who have the highest purchase amount in a day is more than 2000.

SELECT customer_id, ord_date, MAX(purch_amt)
FROM orders
GROUP BY customer_id, ord_date
HAVING MAX(purch_amt) > 2000.00;

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.50	2012-10-05	3005	500
70009	270.65	2012-09-10	3001	500
70002	65.26	2012-10-05	3002	500
70004	110.50	2012-08-17	3009	500
70007	948.50	2012-09-10	3005	500
70005	2400.60	2012-07-27	3007	500
70008	5760.00	2012-09-10	3002	500
70010	1983,43	2012-10-10	3004	500
70003	2480.40	2012-10-10	3009	500
70012	250.45	2012-05-27	3008	500
70011	75.29	2012-08-17	3003	500
70013	3045.60	2012-04-25	3002	500
	i, ord_date, M			
customer_id				
customer_ic	i, ord_date, M. r_id,ord_date customer_id	AX(purch_a	purch_am	purch_amt)>2
customer_id	i, ord_date, M, r_id,ord_date customer_id 300	AX(purch_a ord_date 9 2012-10-1	purch_am 0 2480	purch_amt)>2 t
customer_id	t, ord_date, M. r_id,ord_date customer_id 300 300	AX(purch_a ord_date 9 2012-10-1 7 2012-07-2	purch_am 0 2480 7 2400	purch_amt)>2 1 40 60
customer_id	i, ord_date, M. r_id,ord_date customer_id 300 300 300	AX(purch_s ord_date 9 2012-10-1 7 2012-07-2 5 2012-09-1	purch_am 0 2480 7 2400 0 948	purch_amt)>2 t 40 60 50
customer_id	i, ord_date, M. r_id,ord_date customer_id 300 300 300 300	AX(purch_a ord_date 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1	purch_am 0 2480 7 2400 0 948 0 5760	purch_amt)>2 t 40 60 50
customer_id	i, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300	ord_date 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1 2 2012-09-1 2 2012-04-2	purch_am 0 2480 7 2400 0 948 0 5760 5 3045	purch_amt)>2 t 40 60 50 60
customer_id	f, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300	ord_date 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1 2 2012-09-1 1 2012-09-1	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270	purch_amt)>2 t 440 660 650 660 665
customer_id	f, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300 300 300	AX(purch_s ord_date 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1 2 2012-09-1 1 2012-09-1 4 2012-10-1	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983	purch_amt)>2 t 40 60 50 60 65 65 65 65
customer_ic	i, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300 300 300 30	AX(purch_s ord_date 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1 2 2012-09-1 1 2012-09-1 4 2012-10-1 3 2012-08-1	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983 7 75	purch amt)>
customer_ic	i, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300 300 300 30	AX(purch_s ord_date 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1 2 2012-09-1 1 2012-09-1 4 2012-10-1	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983 7 75 6 150	purch amt)> t (40 (60 (60 (65) (65) (65) (65) (65) (65) (65) (65)
customer_ic	f, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300 300 300 30	AX(purch_s 0rd_date 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1 2 2012-09-1 2 2012-09-1 1 2012-09-1 4 2012-10-1 3 2012-08-1 5 2012-10-0	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983 7 75 5 150 7 250	purch amt)>2 t 40 60 50 60 65 60 65 50 50
customer_ic	t, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300 300 300 30	AX(purch_s ord_date 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1 2 2012-09-1 2 2012-09-1 1 2012-09-1 4 2012-10-1 3 2012-08-1 5 2012-10-0 8 2012-06-2	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983 7 755 5 1500 7 2500 5 65	purch amt)>2 t 40 60 60 65 43 29 50 445 26
customer_ic	t, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300 300 300 30	AX(purch_s 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1 4 2012-09-1 4 2012-09-1 4 2012-09-1 5 2012-09-1 5 2012-00-8 8 2012-00-8 9 2012-00-2 2 2012-10-0	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983 7 755 5 1500 7 2500 5 65	purch amt)>2 t 40 60 60 65 43 29 50 445 26
customer_ic	t, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300 300 300 30	AX(purch_s ord_date 2012-10-1 2012-07-2 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 000000000000000000000000000000000000	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983 7 755 5 1500 5 6565 7 110 a purch_am	purch amt)>2 t 40 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60
customer_ic	t, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300 300 300 30	AX (purch_s 9 2012-10-1 7 2012-07-2 2 2012-09-1 2 2012-09-1 2 2012-09-1 1 2012-09-1 4 2012-09-1 3 2012-08-1 2 2012-08-1 9 2012-08-1	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983 7 755 5 1500 7 2500 6 655 7 110 an purch_am	purch amt)>2 t 40 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60
customer_ic	t, ord_date, M, r_id,ord_date customer_id 300 300 300 300 300 300 300 300 300 30	AX(purch_s ord_date 2012-10-1 2012-07-2 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 2012-09-1 000000000000000000000000000000000000	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983 7 75 5 150 7 250 6 65 7 110 0 2480 0 2480	purch_amt)>2 t 40 60 50 60 60 60 60 60 60 60 60 60 60 60 60 60
customer_ic	t, ord_date, M, r_id,ord_date eustomer_id 300 300 300 300 300 300 300 300 300 30	AX(purch_s ord_date 9 2012-10-1 7 2012-07-2 5 2012-09-1 2 2012-09-1 2 2012-09-1 1 2012-09-1 4 2012-09-1 5 2012-10-0 8 2012-08-1 5 2012-10-0 9 2012-08-1 9 2012-08-1 4 ord_date 9 2012-10-1	purch_am 0 2480 7 2400 0 948 0 5760 5 3045 0 270 0 1983 7 75 5 150 7 250 6 65 7 110 0 2480 10 2480 27 2400	purch amt)>

Query 24 (table: orders)

• Write a SQL statement that counts all orders for a date August 17th, 2012.

SELECT COUNT(*) FROM orders WHERE ord_date = '2012-08-17';

70001 70009 70002 70004 70007 70005 70008 70008 70003 70010 70013	110.50 948.50 2400.60 5760.00 1983.43 2480.40 250.45	2012 2012 2012 2012 2012 2012 2012 2012	09-10 10-05 08-17 09-10 07-27 09-10 10-10 10-10 06-27 08-17		3005 3001 3002 3009 3005 3007 3002 3004 3008 3008 3008 3003		5002 5005 5001 5003 5002 5001 5006 5003 5006 5003 5002 5007 5001
70002 70004 70007 70005 70008 70010 70010 70012 70011 70013	65.26 110.50 948.50 2400.60 5760.00 1983.43 2480.40 250.45 75.29 3045.60	2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012-	-10-05 -08-17 -09-10 -07-27 -09-10 -10-10 -10-10 -06-27 -08-17		3002 3009 3005 3007 3002 3004 3009 3008 3003		5001 5003 5002 5001 5001 5006 5003 5003 5002 5007
70004 70007 70005 70008 70010 70003 70012 70011 70013	110.50 948.50 2400.60 5760.00 1983.43 2480.40 250.45 75.29 3045.60	2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012-	08-17 09-10 07-27 09-10 -10-10 -10-10 -06-27 -08-17		3009 3005 3007 3002 3004 3009 3008 3003		5003 5002 5001 5001 5006 5003 5003 5002 5007
70007 70005 70008 70010 70003 70012 70011 70011	948.50 2400.60 5760.00 1983.43 2480.40 250.45 75.29 3045.60	2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012-	-09-10 -07-27 -09-10 -10-10 -10-10 -06-27 -08-17		3005 3007 3002 3004 3009 3008 3008		5002 5001 5001 5006 5003 5002 5007
70005 70008 70010 70003 70012 70011 70013	2400.60 5760.00 1983.43 2480.40 250.45 75.29 3045.60	2012- 2012- 2012- 2012- 2012- 2012- 2012- 2012-	-07-27 -09-10 -10-10 -10-10 -06-27 -08-17		3007 3002 3004 3009 3008 3003		5001 5001 5006 5003 5002 5007
70008 70010 70003 70012 70011 70013	5760.00 1983.43 2480.40 250.45 75.29 3045.60	2012- 2012- 2012- 2012- 2012- 2012- 2012-	-09-10 -10-10 -10-10 -06-27 -08-17		3002 3004 3009 3008 3003		5001 5006 5003 5002 5007
70010 70003 70012 70011 70013	1983.43 2480.40 250.45 75.29 3045.60	2012- 2012- 2012- 2012- 2012-	-10-10 -10-10 -06-27 -08-17		3004 3009 3008 3003		5006 5003 5002 5007
70003 70012 70011 70013	2480.40 250.45 75.29 3045.60	2012- 2012- 2012- 2012-	-10-10 -06-27 -08-17		3009 3008 3003		5003 5002 5007
70012 70011 70013	250.45 75.29 3045.60	2012- 2012- 2012-	-06-27 - <mark>08-17</mark>		3008 3003		5002 5007
70011 70013	75.29 3045.60	2012- 2012-	-08-17		3003		5007
70013	3045.60	2012-					
			-04-25		3002		5001
LECT							
	orders E ord_date=	_			2012-08-	. <mark>17'</mark>	J
	purch_	amt	ord_da	ite	custom	er_id	salesm
1000	11	0.50	2012-08	8-17		3009	500
70004		5 20	2012-08	8-17		3003	500
_	70004	purch_ 70004 11	purch_amt 70004 110.50	purch_amt ord_da 70004 110.50 2012-0	purch_amt ord_date 70004 110.50 2012-08-17	purch_amt ord_date custom 70004 110.50 2012-08-17	70004 110.50 2012-08-17 3009

2

SQL Practice 2 Multiple tables Joins Nested Queries

Link: <u>https://www.w3resource.com/sql-exercises/</u>

salesman		
salesman_id	name	city
5001	Tomos Noos	New York
5001	James Hoog	New IOIK

5002

5005

5006

5003

5007

Nail Knite

Lauson Hen

Paul Adam

Pit Alex

Mc Lyon

customer

commission

0.15

0.13

0.11

0.14

0.12

0.13

customer_id	customer_name	city	grade	salesman_id
3002	Nick Rimando	New York	100	5001
3005	Graham Zusi	California	200	5002
3001	Brad Guzan	London		
3004	Fabian Johns	Paris	300	5006
3007	Brad Davis	New York	200	5001
3009	Geoff Camero	Berlin	100	
3008	Julian Green	London	300	5002
3003	Jozy Altidor	Moncow	200	5007

order

Paris

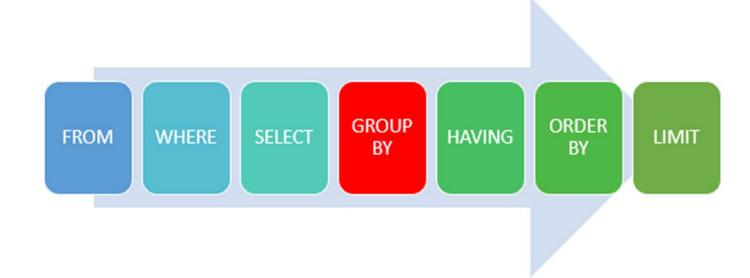
Paris

Rome

London

order no	purch amt	order date	customer id	salesman id
70001	150.5	2016-10-05	3005	5002
70009	270.65	2016-09-10	3001	
70002	65.26	2016-10-05	3002	5001
70004	110.5	2016-08-17	3009	
70007	948.5	2016-09-10	3005	5002
70005	2400.6	2016-07-27	3007	5001
70008	5760	2016-09-10	3002	5001
70010	1983.43	2016-10-10	3004	5006
70003	2480.4	2016-10-10	3009	
70012	250.45	2016-06-27	3008	5002
70011	75.29	2016-08-17	3003	5007

Order of SQL Statement

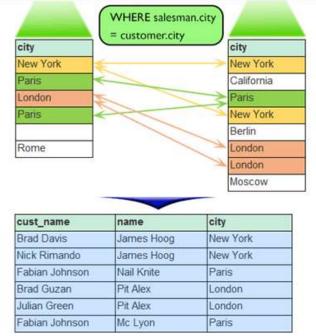


• Find the name and city of those customers and salesmen who lives in the same city.

<u>cust_name</u>	name	city
Nick Rimando	James Hoog	New York
Brad Davis	James Hoog	New York
Julian Green	Pit Alex	London
Fabian Johnson	Mc Lyon	Paris
Fabian Johnson	Nail Knite	Paris
Brad Guzan	Pit Alex	London

SELECT C.cust_name S.name S.city FROM salesman AS S customer AS C WHERE S.city = C.city

(sales FRO	sman.na M sale	stomer.cu ame, salesr sman, cust lesman.cit	nan.city	1/12	tomer)
				customer_id	1	city	grade	salesman_id
-	sales	man		3002	Nick Rimando	New York	100	5001
salesman_id	name	city	commission	3005	Graham Zusi	California	200	5002
5001	James Hoog	New York	0.15	3004	Fabian Johnson	Paris	300	5006
5002	Nail Knite	Paris	0.13	3007	Brad Davis	New York	200	5001
5005	Pit Alex	London	0.11	3009	Geoff Cameron	Berlin	100	5003
5006	Mc Lyon	Paris	0.14	3008	Julian Green	London	300	5002
5003	Lauson Hense		0.12	3001	Brad Guzan	London		5005
5007	Paul Adam	Rome	0.13	3003	Jozy Altidore	Moscow	200	5007

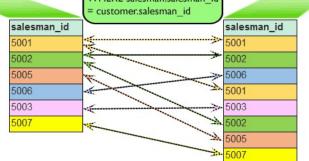


• Find the names of all customers along with the salesmen who works for them.

<u>cust_name</u>	name
Nick Rimando	James Hoog
Brad Davis	James Hoog
Graham Zusi	Nail Knite
Julian Green	Nail Knite
Fabian Johnson	Mc Lyon
Geoff Cameron	Lauson Hen
Jozy Altidor	Paul Adam
Brad Guzan	Pit Alex

SELECT customer.cust_name salesman.name
FROM customer salesman
WHERE salesman.salesman_id = customer.salesman_id;

(er,salesma nan.salesm		istomer.sa	lesman _.	_id;	5
						omer		¥
				customer_id	cust_name	city	grade	salesman_i
	sales	man		3002	Nick Rimando	New York	100	5001
salesman_id	name	city	commission	3005	Graham Zusi	California	200	5002
5001	James Hoog	New York	0.15	3004	Fabian Johnson	Paris	300	5006
5002	Nail Knite	Paris	0.13	3007	Brad Davis	New York	200	5001
5005	Pit Alex	London	0.11	3009	Geoff Cameron	Berlin	100	5003
	Mc Lyon	Paris	0.14	3008	Julian Green	London	300	5002
5006			0.12	3001	Brad Guzan	London		5005
5006 5003	Lauson Hense			3003	Jozy Altidore	Moscow	200	5007

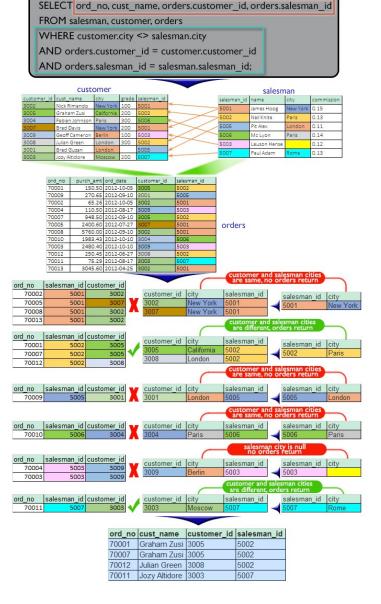


cust_name	name
Nick Rimando	James Hoog
Graham Zusi	Nail Knite
Fabian Johnson	Mc Lyon
Brad Davis	James Hoog
Geoff Cameron	Lauson Hense
Julian Green	Nail Knite
Brad Guzan	Pit Alex
Jozy Altidore	Paul Adam

• Display all those orders by the customers not located in the same cities where their salesmen live.

ord_no	cust_name	customer_id	salesman_id
70004	Geoff Cameron	3009	5003
70003	Geoff Cameron	3009	5003
70011	Jozy Altidor	3003	5007
70001	Graham Zusi	3005	5002
70007	Graham Zusi	3005	5002
70012	Julian Green	3008	5002

SELECT ord_no cust_name orders.customer_id
orders.salesman_id
FROM salesman customer orders
WHERE customer.city <> salesman.city
AND orders.customer_id = customer.customer_id
AND orders.salesman_id = salesman.salesman_id;



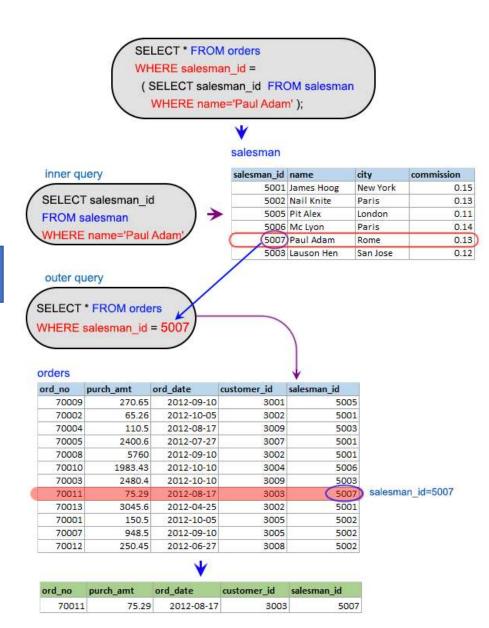
Query 4 (using subquery)

Display all the orders issued by the salesman 'Paul Adam' from the orders table.

<u>ord_no</u>	purch_amt	ord_date	customer_id	salesman_id
70011	75.29	2012-08-17	3003	5007

SELECT * FROM orders WHERE salesman_id = (SELECT salesman_id FROM salesman WHERE name = 'Paul Adam');

• Can we make this query unnested? If yes how?



Query 5 (using subquery)

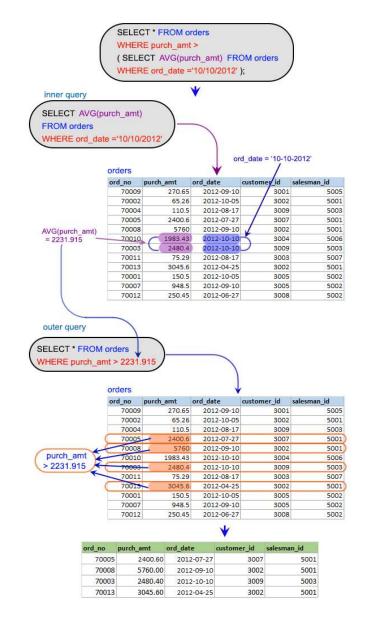
Display all the orders which values are greater than the average order value for 10th October 2012.

<u>ord_no</u>	purch_amt	ord_date	customer_id	salesman_id
70005	2400.60	2012-07-27	3007	5001
70008	5760.00	2012-09-10	3002	5001
70003	2480.40	2012-10-10	3009	5003
70013	3045.60	2012-04-25	3002	5001

SELECT *

FROM orders
WHERE purch_amt >
 (SELECT AVG(purch_amt)
 FROM orders
 WHERE ord_date = '2012-10-10');

• Can we make this query unnested? If yes how?



Query 6 (using subquery)

Find all orders attributed to salesmen in Paris.

_ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150.50	2012-10-05	3005	5002
70007	948.50	2012-09-10	3005	5002
70012	250.45	2012-06-27	3008	5002
70010	1983.43	2012-10-10	3004	5006

SELECT * FROM orders WHERE salesman_id IN (SELECT salesman_id FROM salesman WHERE city ='Paris');

• Can we make this query unnested? If yes how?

Query 7 (using subquery)

Extract the data from the orders table for the salesman who earned the maximum commission.

<u>ord_no</u>	purch_amt	ord_date	salesman_id
70002	65.26	2012-10-05	5001
70005	2400.60	2012-07-27	5001
70008	5760.00	2012-09-10	5001
70013	3045.60	2012-04-25	5001

SELECT ord_no, purch_amt, ord_date, salesman_id FROM orders

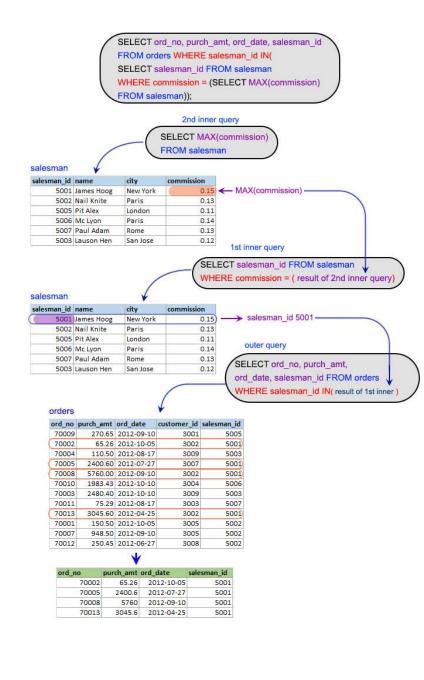
```
WHERE salesman_id IN (
```

```
SELECT salesman_id
FROM salesman
```

```
WHERE commission = (
```

- SELECT MAX(commission)
- FROM salesman)

);



Query 8 (using subquery)

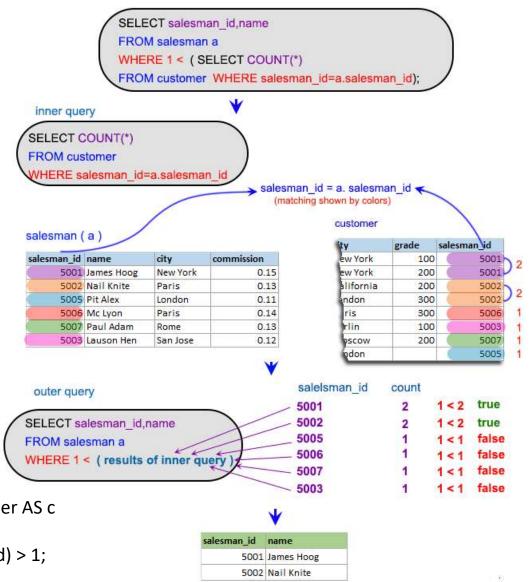
Find the name and ids of all salesmen who had more than one customer.

salesman_	id	name
5001		James Hoog
5002		Nail Knite

```
SELECT salesman_id, name
FROM salesman AS a
WHERE 1 <
 (SELECT COUNT(*)
 FROM customer AS c
 WHERE c.salesman_id = a.salesman_id);</pre>
```

• Can we make this query unnested? If yes how?

SELECT c.salesman_id, s.name FROM salesman AS s, customer AS c
where s.salesman_id = c.salesman_id
group by c.salesman_id, s.name Having count(c.salesman_id) > 1;



Query 9 (using subquery)

Write a query to find all the salesmen who worked for only one customer.

salesman_id	name	city	commission
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5007	Paul Adam	Rome	0.13
5003	Lauson Hen	San Jose	0.12

SELECT *

FROM salesman
WHERE salesman_id IN (
 SELECT DISTINCT salesman_id
 FROM customer a
 WHERE NOT EXISTS (
 SELECT * FROM customer b
 WHERE a.salesman_id = b.salesman_id
 AND a.cust_name <> b.cust_name));

	AN	ID a.d	cust_nar	me<	>b.cust	_name));			_				
2nd inne	r query												
	* FROM	custo	mer b. c	custo	omer a								
1	b.salesm												
A CONTRACTOR OF	ust_name				- ,								
					~	-							
customer (a			and and			custom				1		14	
customer_id 3002	Nick Rimar		salesr	nan_i 500		custom		cust_name		3	alesman 5	001	
3007	Brad Davis			500	01		3007	Brad Davis			5	001	
	Graham Zu			500				Graham Zu				002	
	Julian Gree Fabian Joh			500				Julian Gre				002	
3009	Geoff Cam	eron	ant.	500				Geoff Cam				003	
	Jozy Altido			500				Jozy Altido				007	
3001	Brad Guzar	n		500)5			Brad Guza	n			005	
customer_id cu	st_name		salesman	_id				cust_name Nick Rimar		S	alesman	id 001 fa	le
3002 Ni	ck Rimando	0	5	001				Brad Davis	uo			001 tru	
											and	vice ve	rs
ustomer_id cus	t name		salesman	id		custome	er_id	cust_name		s	alesman		
	aham Zusi			002	~			Graham Zu Julian Gree		277.		002 fa	
customer_id cust		city	grade	e sale	d inner o esman_id	query retu customer_i	rns d cus	it_name	city	Vork		salesmai	
3002 Nick	Rimando	New Y	ork 10	e sale	d inner o esman_id 5001	customer_i	rns d cus 07 Bra	t_name ad Davis	New		200	-	500
3002 Nick 3007 Bra	c Rimando d Davis	New Ye	ork 10 ork 20	e sale 10 10	d inner o esman_id 5001 5001	query retu customer_i 	ms d cus 07 Bra 02 Nic	it_name ad Davis ck Rimando	New New	York	200 100	-	50
3002 Nick	k Rimando d Davis ham Zusi	New Y	ork 10 ork 20 mia 20	e sali 00 00 00	d inner o esman_id 5001	customer_i 30 30 30 30	ms d cus 07 Bra 02 Nic 08 Jul	t_name ad Davis	New	York on	200		50 50
3002 Nick 3007 Brad 3005 Gra 3008 Juli	c Rimando d Davis ham Zusi an Green	New Ye New Ye Califor	ork 10 ork 20 mia 20	e sali 00 00 00	d inner (esman_id 5001 5002	customer_i 30 30 30 30	ms d cus 07 Bra 02 Nic 08 Jul	it_name ad Davis ck Rimando ian Green aham Zusi	New New Lond Calife	York on	200 100 300 200		50 50
3002 Nick 3007 Brai 3005 Gra 3008 Juli 1st inner	c Rimando d Davis ham Zusi an Green query	New Ye New Ye Califor	ork 10 ork 20 rnia 20 n 30	e sali 00 00 00 00	d inner (esman_id 5001 5001 5002 5002	customer_i 30 30 30 30	ms d cus 07 Bra 02 Nic 08 Jul	it_name ad Davis ck Rimando ian Green aham Zusi salesma	New New Lond Calife	York on	200 100 300 200		50 50 50
3002 Nici 3007 Brai 3005 Gra 3008 Juli 1st inner SELECT	Rimando d Davis ham Zusi an Green query DISTINC	New Yo New Yo Califor Londor	ork 10 ork 20 rnia 20 n 30	e sali 00 00 00 00	d inner (esman_id 5001 5001 5002 5002	customer_i 30 30 30 30	ms d cus 07 Bra 02 Nic 08 Jul	it_name ad Davis ck Rimando ian Green aham Zusi salesma	New New Lond Calife	York on ornia	200 100 300 200 excep	t those	50 50 50
3002 Nici 3007 Brai 3005 Gra 3008 Juli 1st inner SELECT FROM ct	Rimando d Davis ham Zusi an Green query DISTINC ustomer a	New Yo New Yo Califor Londor	ork 10 ork 20 rnia 20 n 30 esman_ tru	e sali 00 00 00 00 id	d inner of esman_id 5001 5002 5002 5002	customer_i 30 30 30 30	ms d cus 07 Bra 02 Nic 08 Jul	st_name ad Davis ck Rimando ian Green aham Zusi salesma	New Lond Calify n_id 5003	York on ornia	200 100 300 200	t those	50 50
3002 Nici 3007 Brai 3005 Gra 3008 Juli 1st inner SELECT FROM ct	Rimando d Davis ham Zusi an Green query DISTINC	New Yo New Yo Califor Londor	ork 10 ork 20 rnia 20 n 30 esman_ tru	e sali 00 00 00 00 id	d inner of esman_id 5001 5002 5002 5002	customer_i 30 30 30 30	ms d cus 07 Bra 02 Nic 08 Jul	it_name ad Davis ck Rimando ian Green aham Zusi salesma	New Lond Califu n_id 5003	York on ornia	200 100 300 200 excep	t those	50 50
3002 Nici 3007 Bra- 3005 Gra 3008 Juli 1st inner SELECT FROM ct WHERE	a Rimando d Davis ham Zusi an Green query DISTINC JSTOMER a NOT EXIS	New Yo New Yo Califor Londor	ork 10 ork 20 rnia 20 n 30 esman_ tru	e sali 00 00 00 00 id	d inner of esman_id 5001 5002 5002 5002	customer_i 30 30 30 30	ms d cus 07 Bra 02 Nic 08 Jul	it_name ad Davis ck Rimando ian Green aham Zusi salesma	New Lond Calife 5003 5005 5007	York on ornia	200 100 300 200 excep	t those	50 50 50
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Query 9: Equivalent Queries

Write a query to find all the salesmen who worked for only one customer.

salesman_id	name	city	commission
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5007	Paul Adam	Rome	0.13
5003	Lauson Hen	San Jose	0.12

SELECT c.salesman_id, s.name, s.city, s.commission
FROM salesman s, customer c
where s.salesman_id = c.salesman_id
group by c.salesman_id, s.name
Having count(c.salesman_id) = 1;

SELECT *

FROM salesman
WHERE salesman_id NOT IN (
 SELECT a.salesman_id
 FROM customer a, customer b
 WHERE a.salesman_id = b.salesman_id
 AND a.cust_name <> b.cust_name);

Query 10 (using subquery)

Display all the orders that had amounts that were greater than at least one of the orders from September 10th 2012.

ord_no	purch_amt	ord_date	customer_id	salesman_id	
70005	2400.60	2012-07-27	3007	5001	retrieve purch_amt (270.65, 5760, 948.5)
70008	5760.00	2012-09-10	3002	5001	
70010	1983.43	2012-10-10	3004	5006	
70003	2480.40	2012-10-10	3009	5003	outer query
70013	3045.60	2012-04-25	3002	5001	ELECT * FROM Orders WHERE purch_amt > ANY
70007	948.50	2012-09-10	3005	5002	(270,65, 5760, 948.5)

SELECT * FROM Orders WHERE purch amt > ANY (SELECT purch amt FROM orders WHERE ord date='2012/09/10'

ord_no	purch_amt	ord_date	customer_id	
70009	270.65	2012-09-10	3001	
70002	65.26	2012-10-05	3002	
70004	110.5	2012-08-17	3009	
70005	2400.6	2012-07-27	3007	
70008	5760	2012-09-10	- 3002	
70010	1983.43	2012-10-10	3004	
70003	2480.4	2012-10-10	3009	
70011	75.29	2012-08-17	3003	
70013	3045.6	2012-04-25	3002	
70001	150.5	2012-10-05	3005	
70007	948.5	2012-09-10	3005	
70012	250.45	2012-06-27	3008	

** > ANY means > the minimum (270.65)

inner query

FROM orders

SELECT purch amt

VHERE ord date='2012/09/10

ord_no	purch_amt	ord_date	customer_id
70009	270.65	2012-09-10	3001
70002	65.26	2012-10-05	3002
70004	110.5	2012-08-17	3009
70005	2400.6	2012-07-27	3007
70008	5760	2012-09-10	3002
70010	1983.43	2012-10-10	3004
70003	2480.4	2012-10-10	3009
70011	75.29	2012-08-17	3003
70013	3045.6	2012-04-25	3002
70001	150.5	2012-10-05	3005
70007	948.5	2012-09-10	3005
70012	250.45	2012-06-27	3008

SELECT *

FROM Orders WHERE purch amt > ANY

(SELECT purch amt **FROM** orders **WHERE** ord_date = '2012-09-10');

ord_no	purch_amt	ord_date	customer_id	salesman_id	
70005	2400.60	2012-07-27	3007	5001	
70008	5760.00	2012-09-10	3002	5001	
70010	1983.43	2012-10-10	3004	5006	
70003	2480.40	2012-10-10	3009	5003	
70013	3045.6	2012-04-25	3002	5001	
70007	948,5	2012-09-10	3005	5002	

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Query 11 (using subquery)

display only those customers whose grade are, in fact, higher than every customer in New York.

customer_id	cust_name	city	grade	salesman_id
3008	Julian Green	London	300	5002
3004	Fabian Johnson	Paris	300	5006

SELECT * FROM customer

WHERE grade > ALL

(SELECT grade FROM customer WHERE city = 'NewYork');

