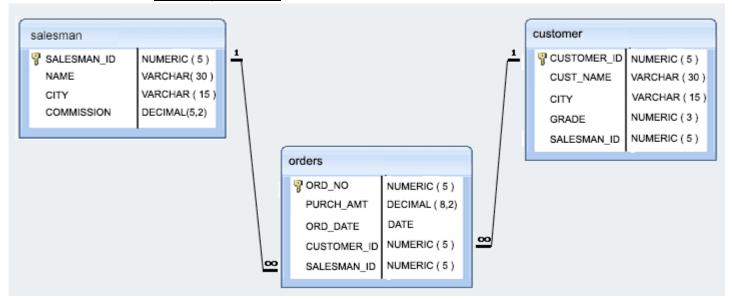


#### DBMS LAB. ASSIGNMENT

Roll Number:	22051437	Branch/Section:	CSE-45
Name in Capital:		Mridul Moona	

Consider the structure of **inventory database** as follows:



Compose queries based on the provided inventory database and the reference given below:

Reference: <a href="https://www.w3resource.com/sql-exercises/sql-joins-exercises.php">https://www.w3resource.com/sql-exercises/sql-joins-exercises.php</a>

Visit the link to access SQL exercises that focus on JOINS, comprising a total of 29 questions with corresponding solutions. It is recommended to practice all the exercises, but for the purpose of lab record submission, choose any 10 questions from the set of 29.

#### Instruction

For each question and its solution, given tables data will be same, you change either the question for the query that must cover atleast two tables data and write SQL query for the same or write a SQL query that is different from the given solution/answer for the given question. One sample assignment solution is given as follows: Suppose you are solving assignment no. 6.3 wrt to the question no-1, then write as follows.

Q. No. Wrt above link		Question for the query	Answer
	Given =>	From the following tables write a SQL query to find the salesperson and customer who reside in the same city. Return Salesman, cust_name and city.	SELECT salesman.name AS "Salesman", customer.cust_name, customer.city FROM salesman,customer WHERE salesman.city=customer.city;
1	I have Changed =>	Changed as follows: Write a SQL query to find the salesperson and customer who reside in the same city and they have the same name. Return Salesman, cust name and city.	My Answer SELECT salesman.name AS "Salesman", customer.cust_name, customer.city FROM salesman,customer WHERE salesman.city=customer.city and salesman.name=customer.cust_name;

The Tables are as follows:

#### **Input**

**Table-1: customer** 

customer_id	cust_name	city	grade	salesman_id
3007 3005 3008	Julian Green   Fabian Johnson   Geoff Cameron   Jozy Altidor	New York New York California London Paris Berlin Moscow	100   200   200   300   300   100   200	5001 5001 5002 5002 5006 5003 5007
3001	Brad Guzan	London		5005

Table-2: 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
5007	Paul Adam	Rome	0.13
5003	Lauson Hen	San Jose	0.12

#### **Output**

With reference to the above sample solution, solve assignment-6 and Create the above tables and practise the queries, you may cross check your query online through the above link after each question by clicking Go to the editor. Write everything in A4 size paper including the table data and following the sample format for each question. This type of questions you may find in sessional exam. Submit this file (typed, not hand writen) in google classroom after solving each question similar to sample given above.

# Assignmnet-6

## Assignment - 6.1

Q.No.		Question for the query	Answer
Wrt above link			
	Given =>	From the following tables write a SQL query to locate those salespeople who do not live in the same city where their customers live and have received a commission of more than 12% from the company. Return Customer Name, customer city, Salesman, salesman city, commission.	SELECT a.cust_name AS "Customer Name", a.city, b.name AS "Salesman", b.city,b.commission FROM customer a INNER JOIN salesman b ON a.salesman_id=b.salesman_id WHERE b.commission>.12 AND a.city<>b.city;
5	I have Changed =>	From the following tables write a SQL query to locate those salespeople who live in the same city where their customers live and have received a commission of more than 12% from the company. Return Customer Name, customer city, Salesman, salesman city, commission.	SELECT a.cust_name AS "Customer Name", a.city, b.name AS "Salesman", b.city,b.commission FROM customer a INNER JOIN salesman b ON a.salesman_id=b.salesman_id WHERE b.commission>.12 AND a.city=b.city;

### The Tables are as follows:

#### **INPUT**

### Customer

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

### salesman

salesman_id		<del>-</del>	
5001	James Hoog   Nail Knite	New York	0.15
5005	Pit Alex	London	0.11
5006	Mc Lyon	Paris	0.14
5007	Paul Adam	Rome	0.13
5003 L	Lauson Hen l	San Jose	0.12

# **OUTPUT**

Customer Name	city	Salesman	commission
Nick Rimando	New York	James Hoog	0.15
Brad Davis	New York	James Hoog	0.15
Graham Zusi	California	Nail Knite	0.13
Julian Green	London	Nail Knite	0.13
Fabian Johnson	Paris	Mc Lyon	0.14
Geoff Cameron	Berlin	Lauson Hen	0.12
Jozy Altidor	Moscow	Paul Adam	0.13
Brad Guzan	London	Pit Alex	0.11

# Assignment - 6.2

Q.No. Wrt above link		Question for the query	Answer
9	Given =>	From the following tables write a SQL query to find those customers with a grade less than 300. Return cust_name, customer city, grade, Salesman, salesmancity. The result should be ordered by ascending customer_id.	SELECT a.cust_name,a.city,a.grade, b.name AS "Salesman", b.city FROM customer a LEFT OUTER JOIN salesman b ON a.salesman_id=b.salesman_id WHERE a.grade<300 ORDER BY a.customer_id;
	I have Changed =>	From the following tables write a SQL query to find those customers with a grade less than 300. Return cust_name, customer city, grade,	SELECT a.cust_name,a.city,a.grade, b.name AS "Salesman", b.city FROM customer a LEFT OUTER JOIN salesman b ON a.salesman_id=b.salesman_id WHERE a.grade<300 ORDER BY a.customer_id

Salesman, salesmancity. The	DESC;
result should be ordered by	
descending customer id.	

### The Tables are as follows:

### **INPUT**

# Customer

customer_id	cust_name	l city	grade	salesman_id
3002 3007 3005 3008 3004 3009		+   New York   New York   California   London   Paris   Berlin	100   200   200   300   300   100	5001   5001   5002   5002   5006
3003 3001	Jozy Altidor   Brad Guzan	Moscow   London	200	5007 5005

## salesman

<del>-</del>	name	-	
5001	James Hoog	New York	0.15
	Nail Knite Pit Alex		•
5006	Mc Lyon	Paris	0.14
5007	Paul Adam	Rome	0.13
5003	Lauson Hen	San Jose	0.12

cust_name	city	grade	Salesman
Geoff Cameron	San Jose	100	Lauson Hen
Brad Davis	New York	200	James Hoog
Graham Zusi	Paris	200	Nail Knite
Jozy Altidor	Rome	200	Paul Adam
Nick Rimando	New York	100	James Hoog

Q.No. Wrt above link		Question for the query	Answer
22	Given =>	From the following tables write a SQL query to calculate the average price of items of each company. Return average value and company name.	SELECT AVG(pro_price), company_mast.com_name FROM item_mast INNER JOIN company_mast ON item_mast.pro_com= company_mast.com_id GROUP BY company_mast.com_name;
23	I have Changed =>	From the following tables write a SQL query to calculate the sum price of items of each company. Return sum and company name.	SELECT SUM(pro_price), company_mast.com_name FROM item_mast INNER JOIN company_mast ON item_mast.pro_com= company_mast.com_id GROUP BY company_mast.com_name;

# The Tables are as follows:

## **INPUT**

# company\_mast

COM_ID	COM_NAME
11	Samsung
12	iBall
13	Epsion
14	Zebronics
15	Asus

16 Frontech

# item\_mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11
106	DVD drive	900.00	12
107	CD drive	800.00	12
108	Printer	2600.00	13
109	Refill cartridge	350.00	13
110	Mouse	250.00	12
<b>OUTPUT</b>			

sum	com_name

5000.00	Samsung
250.00	Zebronics
1000.00	Frontech
2950.00	Epsion
1950.00	iBall
3200.00	Asus

Q.No. Wrt above link		Question for the query	Answer
	Given =>	Write a SQL statement to make a report with customer name, city, order number, order date, and order amount in ascending order according to the order date to determine whether any of the existing customers have placed an order or not.	SELECT a.cust_name,a.city, b.ord_no, b.ord_date,b.purch_amt AS "Order Amount" FROM customer a LEFT OUTER JOIN orders b ON a.customer_id=b.customer_id order by b.ord_date;
10	I have Changed =>	Write a SQL statement to make a report with customer name, city, order number, order date, and order amount in ascending order according to the purch_amt to determine whether any of the existing customers have placed an order or not.	SELECT a.cust_name,a.city, b.ord_no, b.ord_date,b.purch_amt AS "Order Amount" FROM customer a LEFT OUTER JOIN orders b ON a.customer_id=b.customer_id order by b.purch_amt;

# The Tables are as follows:

## **INPUT**

Orders:

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150. 5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005

70002	65. 26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948. 5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.4	2012-10-10	3009	5003
70012	250. 45	2012-06-27	3008	5002
70011	75. 29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

#### Customer:

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

cust_name	city	ord_no	ord_date	Order Amount
Nick Rimando	New York	70002	2012-10-05	65.26
Jozy Altidor	Moscow	70011	2012-08-17	75.29
Geoff Cameron	Berlin	70004	2012-08-17	110.50
Graham Zusi	California	70001	2012-10-05	150.50
Julian Green	London	70012	2012-06-27	250.45
Brad Guzan	London	70009	2012-09-10	270.65
Graham Zusi	California	70007	2012-09-10	948.50
Fabian Johnson	Paris	70010	2012-10-10	1983.43
Brad Davis	New York	70005	2012-07-27	2400.60
Geoff Cameron	Berlin	70003	2012-10-10	2480.40
Nick Rimando	New York	70013	2012-04-25	3045.60
Nick Rimando	New York	70008	2012-09-10	5760.00

Q.No. Wrt above link		Question for the query	Answer
4	Given =>	From the following tables write a SQL query to find salespeople who received commissions of more than 12 percent from the company. Return Customer Name, customer city, Salesman, commission.	SELECT a.cust_name AS "Customer Name", a.city, b.name AS "Salesman", b.commission FROM customer a INNER JOIN salesman b ON a.salesman_id=b.salesman_id WHERE b.commission>.12;
4	I have Changed =>	From the following tables write a SQL query to find salespeople who received commissions of less than 12 percent from the company. Return Customer Name, customer city, Salesman, commission.	SELECT a.cust_name AS "Customer Name", a.city, b.name AS "Salesman", b.commission FROM customer a INNER JOIN salesman b ON a.salesman_id=b.salesman_id WHERE b.commission<.12;

## The Tables are as follows:

### **INPUT**

### customer

customer_id	cust_name	city	grade	salesman_id
3002 3007 3005 3008 3004 3009 3003	+	New York   New York   California   London   Paris   Berlin   Moscow	+	+
3001	Brad Guzan	London	1	5005

### salesman

_	name	_	
5001 5002 5005 5006 5007	James Hoog   Nail Knite   Pit Alex   Mc Lyon   Paul Adam   Lauson Hen	New York Paris London Paris Rome	0.15 0.13 0.11 0.14

Customer Name	city	Salesman	commission
Brad Guzan	London	Pit Alex	0.11

Q.No. Wrt above link		Question for the query	Answer
	Given =>	From the following tables write a SQL query to find the details of an order. Return ord_no, ord_date, purch_amt, Customer Name, grade, Salesman, commission.	Select a.order_no,a.ord_date,a.purch_amt,b.cust_name AS "CUSTOMER NAME",b.grade,c.name as "SALESMAN" ,c.commission From orders a inner join customer b on a.customer_id=b.customer_id inner join salesman c ON a.salesman_id=c.salesman_id;
6	I have Changed =>	From the following tables write a SQL query to find the details of an order where purchasing amount exceeds 700. Return ord_no, ord_date, purch_amt, Customer Name, grade, Salesman, commission.	SELECT a.ord_no,a.ord_date,a.purch_amt, b.cust_name AS "Customer Name", b.grade, c.name AS "Salesman", c.commission FROM orders a INNER JOIN customer b ON a.customer_id=b.customer_id INNER JOIN salesman c ON a.salesman_id=c.salesman_id where a.purch_amt>700;

## The Tables are as follows:

### **INPUT**

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150. 5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65. 26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948. 5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.4	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75. 29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

## Customer:

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

3003   Jozy Altido	r Moscow	200	5007
3001   Brad Guzan	London		5005

#### Salesman:

salesman_id	name	city	commission
	James Hoog	New York	0.15
5002	Nail Knite	Paris	0.13
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

### **OUPUT**

ord_no	ord_date	purch_amt	Customer Name	grade	Salesman	commission
70005	2012-07-27	2400.60	Brad Davis	200	James Hoog	0.15
70008	2012-09-10	5760.00	Nick Rimando	100	James Hoog	0.15
70010	2012-10-10	1983.43	Fabian Johnson	300	Mc Lyon	0.14
70003	2012-10-10	2480.40	Geoff Cameron	100	Lauson Hen	0.12
70013	2012-04-25	3045.60	Nick Rimando	100	James Hoog	0.15
70007	2012-09-10	948.50	Graham Zusi	200	Nail Knite	0.13

## Assignment - 6.7

Q.No. Wrt above link		Question for the query	Answer
10	Given =>	Write a SQL statement to generate a list in ascending order of salespersons who work either for one or more customers or have not yet joined any of the customers.	SELECT a.cust_name,a.city,a.grade, b.name AS "Salesman", b.city FROM customer a RIGHT OUTER JOIN salesman b ON b.salesman_id=a.salesman_id ORDER BY b.salesman_id;
12	I have Changed =>	Write a SQL statement to generate a list in ascending order of salespersons commissions who work either for one or more customers or have not yet joined any of the customers.	SELECT a.cust_name,a.city,a.grade, b.name AS "Salesman", b.city FROM customer a RIGHT OUTER JOIN salesman b ON b.salesman_id=a.salesman_id ORDER BY b.commission;

The Tables are as follows:

### **INPUT**

_			
$\sim$	usto	m	or.
$\sim$	มอเน	וווע	CI.

Customer_id	cust_name		city	grade	salesman_id
3002	Nick Rimando	Ne	ew York	100	5001
3007	Brad Davis	N∈	ew York	200	5001
3005	Graham Zusi	Ca	alifornia	a   200	5002
3008	Julian Green	Lo	ondon	300	5002
3004	Fabian Johnso	on   Pa	aris	300	5006
3009	Geoff Cameron	1   Be	erlin	100	5003
3003	Jozy Altidor	Mo	scow	200	5007
3001	Brad Guzan	Lo	ondon		5005
Salesman:					
salesman_id	name	city	comm	nission	
5001	James Hoog	New Yo	+ ork	0. 15	
5002	Nail Knite	Paris		0.13	
5005	Pit Alex	Londor	1	0.11	
5006	Mc Lyon	Paris		0.14	
5007	Paul Adam	Rome		0.13	
5003	Lauson Hen	San Jo	ose	0.12	

### **OUTPUT**

cust_name	city	grade	Salesman
Brad Guzan	London		Pit Alex
Geoff Cameron	San Jose	100	Lauson Hen
Graham Zusi	Paris	200	Nail Knite
Julian Green	Paris	300	Nail Knite
Jozy Altidor	Rome	200	Paul Adam
Fabian Johnson	Paris	300	Mc Lyon
Nick Rimando	New York	100	James Hoog
Brad Davis	New York	200	James Hoog

# Assignment - 6.8

Q.No. Wrt above link		Question for the query	Answer
25	Given =>	From the following tables write a SQL query to find the most expensive product of each company. Return pro_name,	SELECT A.pro_name, A.pro_price, F.com_name FROM item_mast A INNER JOIN company_mast F ON A.pro_com = F.com_id AND A.pro_price = ( SELECT MAX(A.pro_price) FROM item_mast A

	pro_price and com_name.	WHERE A.pro_com = F.com_id );
I have Changed =>	From the following tables write a SQL query to find the most cheap product of each company. Return pro_name, pro_price and com_name.	SELECT A.pro_name, A.pro_price, F.com_name FROM item_mast A INNER JOIN company_mast F ON A.pro_com = F.com_id AND A.pro_price = ( SELECT MIN(A.pro_price) FROM item_mast A WHERE A.pro_com = F.com_id );

#### The Tables are as follows:

#### **INPUT**

### company\_mast

COM\_ID COM\_NAME

11 Samsung
12 iBall
13 Epsion

14 Zebronics
15 Asus

16 Frontech

#### item mast

PRO_ID	PRO_NAME	PRO_PRICE	PRO_COM
101	Mother Board	3200.00	15
102	Key Board	450.00	16
103	ZIP drive	250.00	14
104	Speaker	550.00	16
105	Monitor	5000.00	11

pro_name	pro_price	com_name
Mother Board	3200.00	Asus
Key Board	450.00	Frontech
ZIP drive	250.00	Zebronics
Monitor	5000.00	Samsung

Refill cartridge	350.00	Epsion
Mouse	250.00	iBall

Q.No.		Question for the query	Answer
Wrt			
above link			
	Given =>	From the following tables write a SQL query to display the first and last names of each employee, as well as the department name and sanction amount.	SELECT emp_details.emp_fname AS "First Name", emp_lname AS "Last Name", emp_department.dpt_name AS "Department", dpt_allotment AS "Amount Allotted" FROM emp_details INNER JOIN emp_department ON emp_details.emp_dept = emp_department.dpt_code;
27	I have Changed =>	From the following tables write a SQL query to display the first and last names of each employee, as well as the department name and sanction amount.(Using RIGHT JOIN)	SELECT emp_details.emp_fname AS "First Name", emp_lname AS "Last Name", emp_department.dpt_name AS "Department", dpt_allotment AS "Amount Allotted" FROM emp_details RIGHT JOIN emp_department ON emp_details.emp_dept = emp_department.dpt_code;

### The Tables are as follows:

## **INPUT**

# emp\_department

DPT_CODE	DPT_NAME	DPT_ALLOTMENT
57	IT	65000
63	Finance	15000
47	HR	240000
27	RD	55000
89	QC	75000

# emp\_details

EMP_IDNO	EMP_FNAME	EMP_LNAME	EMP_DEPT
127323	Michale	Robbin	57
526689	Carlos	Snares	63
843795	Enric	Dosio	57
328717	Jhon	Snares	63
444527	Joseph	Dosni	47
659831	Zanifer	Emily	47
847674	Kuleswar	Sitaraman	57
748681	Henrey	Gabriel	47

555935 Alex	Manuel	57
539569 George	Mardy	27
733843 Mario	Saule	63
631548 Alan	Snappy	27
839139 Maria	Foster	57

First Name	Last Name	Department	Amount Allotted
Alan	Snappy	RD	55000
Maria	Foster	IT	65000
Michale	Robbin	IT	65000
Carlos	Snares	Finance	15000
Enric	Dosio	IT	65000
Jhon	Snares	Finance	15000
Joseph	Dosni	HR	240000
Zanifer	Emily	HR	240000
Kuleswar	Sitaraman	IT	65000
Henrey	Gabriel	HR	240000
Alex	Manuel	IT	65000

George	Mardy	RD	55000
Mario	Saule	Finance	15000

Q.No. Wrt above		Question for the query	Answer
link	Given =>	Write a SQL statement to make a list for the salesmen who either work for one or more customers or yet to join any of the customer. The customer may have placed, either one or more orders on or above order amount 2000 and must have a grade, or he may not have placed any order to the associated supplier.	SELECT a.cust_name,a.city,a.grade, b.name AS "Salesman", c.ord_no, c.ord_date, c.purch_amt FROM customer a RIGHT OUTER JOIN salesman b ON b.salesman_id=a.salesman_id LEFT OUTER JOIN orders c ON c.customer_id=a.customer_id WHERE c.purch_amt>=2000 AND a.grade IS NOT NULL;
14	I have Changed =>	Write a SQL statement to make a list for the salesmen who either work for one or more customers or yet to join any of the customer. The customer may have placed, either one or more orders on or above order amount 2000 and should generate a commission of more than 11% for the supplier must have a grade, or he may not have placed any order to the associated supplier.	SELECT a.cust_name,a.city,a.grade, b.name AS "Salesman", c.ord_no, c.ord_date, c.purch_amt FROM customer a RIGHT OUTER JOIN salesman b ON b.salesman_id=a.salesman_id LEFT OUTER JOIN orders c ON c.customer_id=a.customer_id WHERE c.purch_amt>=2000 AND a.grade IS NOT NULL AND b.commission>.11;

# The Tables are as follows:

### **INPUT**

Customer:

Customer_id   c	ust_name   city	grade   salesma	ın_ıd	
3002	Nick Rimando	+   New York	100	5001
3007	Brad Davis	New York	200	5001
3005	Graham Zusi	California	200	5002
3008	Julian Green	London	300	5002
3004	Fabian Johnson	Paris	300	5006

3009	Geoff Cameron	Berlin	100	5003
3003	Jozy Altidor	Moscow	200	5007
3001	Brad Guzan	London		5005

#### Salesman:

salesman_id	name		
	James Hoog		
5002	Nail Knite	Paris	0.13
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

#### Orders:

ord_no	purch_amt	ord_date	customer_id	salesman_id
70001	150 5	0010 10 05	2005	
70001	150. 5	2012-10-05	3005	5002
70009	270.65	2012-09-10	3001	5005
70002	65. 26	2012-10-05	3002	5001
70004	110.5	2012-08-17	3009	5003
70007	948. 5	2012-09-10	3005	5002
70005	2400.6	2012-07-27	3007	5001
70008	5760	2012-09-10	3002	5001
70010	1983.43	2012-10-10	3004	5006
70003	2480.4	2012-10-10	3009	5003
70012	250.45	2012-06-27	3008	5002
70011	75. 29	2012-08-17	3003	5007
70013	3045.6	2012-04-25	3002	5001

cust_name	city	grade	Salesman	ord_no	ord_date	purch_amt
Brad Davis	New York	200	James Hoog	70005	2012-07-27	2400.60
Nick Rimando	New York	100	James Hoog	70008	2012-09-10	5760.00
Geoff Cameron	Berlin	100	Lauson Hen	70003	2012-10-10	2480.40
Nick Rimando	New York	100	James Hoog	70013	2012-04-25	3045.60