

National University of Computer and Emerging Sciences



In Lab Exercise

“Data Retrieval & Set Operations”

Database Systems

Fall 2020

Total Time: 90 Minutes

Database

For this in-lab exercise use the following **customer-salesman** schema. Create database, tables and insert values in tables. (30 Minutes)

1) Table Name: **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	San Jose	0.13
5003	Lauson Hen	San Jose	0.12

2) Table Name: **orders**

ord_no	purch_amt	ord_date	customer_id	salesman_id
-----	-----	-----	-----	-----
70001	150.5	2012-10-05	3005	
5002				
70009	270.65	2011-09-10	3001	
5005				
70002	65.26	2014-10-05	3002	
5001				
70004	110.5	2011-08-17	3009	
5003				
70007	948.5	2012-09-10	3005	
5002				
70005	2400.6	2010-07-27	3007	
5001				
70008	5760	2013-09-10	3002	
5001				
70010	1983.43	2010-10-10	3004	
5006				
70003	2480.4	2013-10-10	3009	
5003				
70012	250.45	2010-06-27	3008	
5002				
70011	75.29	2014-08-17	3003	
5007				
70013	3045.6	2010-04-25	3002	
5001				

3) Table Name: **customers**

customer_id	cust_name	city	grade	salesman_id
-----	-----	-----	-----	-----
3002	Nick Rimando	New York	100	5001
3007	John 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	John Brad Guzan	London			Null
5005					

Exercise

Write queries for the following exercise.

1. List all those customers that live in New York, in ascending order of their name.
2. List all those customers who have 'John' in their name and are either from London, Paris or NewYork.
3. List all those customers who are either from London or New York.
4. List those orders whose purchase amount is greater than 500.
5. List all salesmen whose second character in their name contain 'a'.
6. Add 0.5 to the commission of all salesmen who belong to San Jose.
7. List all orders in descending order of their order date.
8. Get the first name of all salesmen and change the column name from name to firstname.
9. List all the orders that were made in January (Hint: use some built-in function).
10. List the year, week, dayofyear, month, day, weekday of all orders in the month of October. (Hint: use some built-in function).
11. Triple the purchase amount of all orders in the month of October.
12. Show those customers who have made order in 2012 as well as 2014. (Hint: use some set operation)
13. Show those customers who have made order in 2011 or in 2013.
14. Show those customers who have made order in 2012 but not in 2014.