

# National University of Computer and Emerging Sciences



## In Lab Exercise

“Data Retrieval & Set Operations”

### Database Systems

Fall 2020

Department of Computer Science  
FAST-NU, Lahore, Pakistan

# 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**

<b>salesman_id</b>	<b>name</b>	<b>city</b>	<b>commission</b>
-----	-----	-----	-----
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**

<b>ord_no</b>	<b>purch_amt</b>	<b>ord_date</b>	<b>customer_id</b>	<b>salesman_id</b>
-----	-----	-----	-----	-----
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**

<b>customer_id</b>	<b>cust_name</b>	<b>city</b>	<b>grade</b>	<b>salesman_id</b>
-----	-----	-----	-----	-----
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. (60 Minutes)

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 New York.
3. List all those customers who are either from London or New York and update their grade to 500.
4. Delete those orders whose purchase amount is greater than 500.
5. List the distinct cities from customer table.
6. List all salesmen whose second character in their name contain 'a'.
7. Add 0.5 to the commission of all salesmen who belong to San Jose.
8. List all orders in descending order of their order date. (2 Minutes)
9. Get the first name of all salesmen and change the column name from name to firstname. (Hint: use some built-in function).
10. List all the orders that were made in January (Hint: use some built-in function).