National University of Computer and Emerging Sciences



In Lab Exercise

"Data Retrieval"

Database Systems Lab

Spring 2023

Department of Computer Science FAST-NU, Lahore, Pakistan

Database

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

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 those orders whose purchase amount is between 500 and 3000.
- 4. List all salesmen whose second character in their name contain 'a'.
- 5. Add 0.5 to the commission of all salesmen who belong to San Jose.
- 6. List all orders in descending order of their order date.
- 7. Get the first name of all salesmen and change the column name from name to firstname.
- 8. List all the orders that were made in January (Hint: use some built-in function).
- 9. Show the details of the salesman who has max commission. (Hint: Order your data in descending order and use top row, search for top key word in MS SQL)
- 10. Name the customers who don't have any grade
- 11. List the highest, lowest and average purchase amount done ever
- 12. List the details of all customers who are handled by salesman with IDs 5001 and 5003
- 13. List the year, month, day, weekday of all orders in the month of October. (Hint: use some built-in function).
- 14. Triple the purchase amount of all orders in the month of October.
- 15. Show those customers who have made order in 2011 or in 2013.