Q1: **Create the following Databases.**

TABLE NAME:Salesmen

SNUM	SNAME	CITY	COMMISSION
1001	Piyush	London	12 %
1002	Sejal	Surat	13 %
1004	Miti	London	11 %
1007	Rajesh	Baroda	15 %
1003	Anand	New Delhi	10 %

SNUM   : A unique number assigned to each salesman.
SNAME : The name of salesman.
CITY   : The location of salesmen.
COMMISSION: The Salemen's commission on orders.

TABLE NAME: Customers

CNUM	CNAME	CITY	RATING	SNUM
2001	Harsh	London	100	1001
2002	Gita	Rome	200	1003
2003	Lalit	Surat	200	1002
2004	Govind	Bombay	300	1002
2006	Chirag	London	100	1001
2008	Chinmay	Surat	300	1007
2007	Pratik	Rome	100	1004

CNUM   : A unique number assigned to each customer.
CNAME : The name of the customer.
CITY   : The location of the customer.
RATING : A level of preference indicator given to this customer.
SNUM   : The number of salesman assigned to this customer.

TABLE NAME:Orders

ONUM	AMOUNT	ODATE	CNUM	SNUM
3001	18.69	10/03/97	2008	1007
3003	767.19	10/03/97	2001	1001

3005	5160.45	10/03/97	2003	1002
3006	1098.16	10/03/97	2008	1007
3009	1713.23	10/04/97	2002	1003
3007	75.75	10/04/97	2004	1002
3008	4723.00	10/05/97	2006	1001
3010	1309.95	10/06/97	2004	1002
3011	9891.88	10/06/97	2006	1001

ONUM : A unique number assigned to each order.
AMOUNT : The amount of an order.
ODATE : The date of an order.
CNUM : The number of customer making the order.
SNUM : The number of salesman credited with the sale.

Solve the following queries using above databases and group by clause.

Q5: Solve the following queries using above databases

1. Show the name of all customers with their salesman's name.

2. List all customers and salesmen who shared a same city.

3. List all orders with the names of their customer and salesman.

4. List all orders by the customers not located in the same city as their salesman.

5. List all customers serviced by salespeople with commission above 12%.

6. Calculate the amount of the salesman commission on each order by a customer with rating above 100.

7. Find all pairs of customers having the same rating without duplication.

8. List all customers located in cities where salesman Sejal has customers.

9. Find all pairs of customers served by a single salesman with the salesman's name and no.

10. List all salesmen who are living in the same city without duplicate rows.

11. List all pairs of orders by a given customer with customer name.

12. Produce the name and city of all the customers with the same rating as Harsh.

13. Extract all orders of Miti.

14. Extract all orders of Baroda's salesmen.

15. Find all orders of the salesman who services 'Harsh'.

16. List all orders that are greater than the average of October 4,1997.

17. Find the average commission of salesmen in London

18. Find all orders attributed to salesmen in 'London' using both the subquery and join methods.

19. List the commission of all salesmen serving customers in 'London'.

20. Find all customers whose cnum is 1000 above than the snum of Sejal.

21. Count the no. of customers with the rating above than the average of 'Surat'.

22. List all orders of the customer 'Chirag'.

23. Produce the name and rating of all customers who have above average orders.

24. Select the total amount in orders for each salesman for whom this total is greater than the amount of the largest order in the table.

25. List the name and number of all salesmen who has more than one customer.

26. Find all orders with amount atleast equal to the average amounts for their customers.

27. Calculate the total amount ordered on each day eliminating those days where the total amount was not atleast Rs. 2000 above the maximum amount of that day.

28. Select the name and number of all salesmen who have customers in their cities who they do not service.

29. Find the number of all the salesmen having multiple customers using EXIST.

30. Find the name,number and city of all the salesmen having multiple customers using EXIST.

31. Find the name and number of all the salesmen who serve only one customer.

32. Find all salesmen with more than one current order.

33. Display the customer information if and only if one or more of the customers in are located in 'Surat.

34. Find all salesmen who have customers with more than one current order.

35. Find all salesmen who have customers with rating > 300 using EXIST and using join.

36. Find all orders with amounts smaller than any amount for a customer in 'London'.

37. Find all the customers who have greater rating than every customer in 'Rome'.

38. Select all customers whose rating doesn't match with any rating of customer of 'Surat'.

39. List all customers whose ratings are equal to or greater than ANY of 'Sejal'.

40. List all orders for amount greater than any for the customers in London.

41. Find all salesmen and customers located in London.

42. Find out which salesman produce largest and smallest orders on each date.

Q2. Create the tables Employees and Departments having the following structures:

Sample table: Employees

EMPLOYEE_ID	FIRST_NAME	LAST_NAME	SALARY	DEPARTMENT_ID
111	Steven	King	24000	20
112	John	Hopkings	12000	30
113	Alexander	Roy	10000	20
114	Carlie	Nayer	23000	20
115	Julies	Ceaser	8000	40
116	James	Mathew	9000	30
117	Andrew	Matt	5500	30
118	Sunil	Pal	25000	20
119	Roshan	Kumar	15000	40
120	Rahul	Kapoor	16000	40

Sample table: Departments

DEPARTMENT_ID	DEPARTMENT_NAME
20	Accounting
30	IT
40	Marketting

Perform the following operations using nested queries/sub-queries:

a) Find the names (first name as well as last name) and salaries of the employees who have higher salary than the employee whose last name is Hopkings.
b) Find the names (first and last name both) of all the employees who work in the IT department.
c) Find the names (first_name, last_name), salary of the employees whose salary is greater than the average salary.

d) Find the names (first_name, last_name), salary of the employees who earn more than the average salary and who works in any of the IT departments.

e) Find the details of the employees who earn the same salary as the minimum salary for all departments.

f) Find the details of the employees whose salary is greater than average salary of all department.

Q 3. Create the "Customers" table having the following structure:

ID (as a primary key), NAME, AGE, ADDRESS and SALARY

Populate the table with the following records:

ID	NAME	AGE	ADDRESS	SALARY
001	Ramesh	32	Ahmedabad	2000.00
002	Khalid	25	Delhi	1500.00
003	kaushik	23	Kota	2000.00
004	Chaitali	25	Mumbai	6500.00
005	Hardik	27	Bhopal	8500.00
006	Komal	22	MP	4500.00
007	Muffy	24	Indore	10000.00

Perform the following operations on the above table:

a) Create a view called view1 on Customers table that should include ID, NAME and AGE from Customers.

b) Create a view called view2 on Customers table that should include the records of Customers whose salaries are greater than 5000.

c) Insert the following records of customers in the view1:

ID	NAME	AGE
010	Fazil	27
014	Shoaib	31
016	John	NULL

Show the results of View1 as well as the base table Customers after insertion operation.

d) Change the name of customer Komal to ABC by using view1. Display the results of view1 as well as the base table Customers.
e) Modify the salary and age of Muffy in view2 to 15000 and 26 respectively.
f) Delete a record from view1 whose ID is 004. Display the results of view1, view2 and the base table Customers.
g) Destroy the structure of view2.
h) Create a view called view3 on Customers table with name and age. Add check option on age to be not null.
i) Insert a record in view3 ('Rohan', NULL) and ('Joe', 42). Display the results of view3 and Customers table.