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**SEC: B2**

## **Lab 4 Final Task:**

**Customer Table (For filtering by city, name)**

customer_id	name	email	phone	address
1	Alice Johnson	alice@gmail.com	9876543210	New York
2	Bob Smith	bob@yahoo.com	9123456789	Los Angeles
3	Charlie Brown	charlie@outlook.com	9998887776	Chicago
4	David Miller	david@gmail.com	8765432109	Miami
5	Amy Adams	amy@hotmail.com	7654321098	New York

**Product Table (For filtering by category, price, and stock quantity)**

product_id	name	category	price	stock_quantity
1	Milk	Dairy	2.50	50
2	Bread	Bakery	1.80	30
3	Eggs	Dairy	3.20	40
4	Chicken	Meat	7.50	20
5	Apples	Fruit	1.20	60
6	Croissant	Bakery	2.50	25

**Employee Table (For filtering by hire date, salary)**

employee_id	name	role	salary	hire_date
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1	Michael Scott	Manager	75000.00	2020-05-10
2	Jim Halpert	Cashier	30000.00	2021-08-15
3	Pam Beesly	Sales Associate	28000.00	2022-02-20
4	Dwight Schrute	Supervisor	50000.00	2019-11-30

5	Kevin Malone	Cashier	29000.00	2023-03-10
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**Order\_Details Table (For filtering orders based on date)**

order_id	customer_id	order_date	total_amount
1	1	2024-01-10	10.50
2	2	2024-01-12	15.20
3	3	2024-02-01	20.80
4	4	2024-02-05	30.00
5	5	2024-02-10	25.50

1. Write the queries to generate above tables to use as the sample for given below queries.
2. Find all customers **from New York or Los Angeles**.
3. Retrieve products that are **Dairy or Bakery items**.
4. Find employees **hired between 2021 and 2023**.
5. List customers whose **names start with 'A'**.
6. Retrieve orders placed in **February 2024**.
7. Count the total **number of customers**.
8. Find the **average product price**.
9. Get the **maximum salary of employees**.
10. Retrieve the **total revenue from orders**.
11. Find the **minimum stock quantity available**.

```
SQL>
SQL> INSERT INTO Customer VALUES (1, 'Alice Johnson', 'alice@gmail.com', '9876543210', 'New York');
1 row created.

SQL> INSERT INTO Customer VALUES (2, 'Bob Smith', 'bob@yahoo.com', '9123456789', 'Los Angeles');
1 row created.

SQL> INSERT INTO Customer VALUES (3, 'Charlie Brown', 'charlie@outlook.com', '9998887776', 'Chicago');
1 row created.

SQL> INSERT INTO Customer VALUES (4, 'David Miller', 'david@gmail.com', '8765432109', 'Miami');
1 row created.

SQL> INSERT INTO Customer VALUES (5, 'Amy Adams', 'amy@hotmail.com', '7654321098', 'New York');
1 row created.

SQL>
SQL> INSERT INTO Product VALUES (1, 'Milk', 'Dairy', 2.50, 50);
1 row created.

SQL> INSERT INTO Product VALUES (2, 'Bread', 'Bakery', 1.80, 30);
1 row created.

SQL> INSERT INTO Product VALUES (3, 'Eggs', 'Dairy', 3.20, 40);
1 row created.

SQL> INSERT INTO Product VALUES (4, 'Chicken', 'Meat', 7.50, 20);
1 row created.

SQL> INSERT INTO Product VALUES (5, 'Apples', 'Fruit', 1.20, 60);
1 row created.

SQL> INSERT INTO Product VALUES (6, 'Croissant', 'Bakery', 2.50, 25);
1 row created.

SQL>
SQL> INSERT INTO Employee VALUES (1, 'Michael Scott', 'Manager', 75000.00, TO_DATE('2020-05-10', 'YYYY-MM-DD'));
1 row created.
```

```
1 row created.

SQL> INSERT INTO Product VALUES (5, 'Apples', 'Fruit', 1.20, 60);

1 row created.

SQL> INSERT INTO Product VALUES (6, 'Croissant', 'Bakery', 2.50, 25);

1 row created.

SQL>
SQL> INSERT INTO Employee VALUES (1, 'Michael Scott', 'Manager', 75000.00, TO_DATE('2020-05-10', 'YYYY-MM-DD'));

1 row created.

SQL> INSERT INTO Employee VALUES (2, 'Jim Halpert', 'Cashier', 30000.00, TO_DATE('2021-08-15', 'YYYY-MM-DD'));

1 row created.

SQL> INSERT INTO Employee VALUES (3, 'Pam Beesly', 'Sales Associate', 28000.00, TO_DATE('2022-02-20', 'YYYY-MM-DD'));

1 row created.

SQL> INSERT INTO Employee VALUES (4, 'Dwight Schrute', 'Supervisor', 50000.00, TO_DATE('2019-11-30', 'YYYY-MM-DD'));

1 row created.

SQL> INSERT INTO Employee VALUES (5, 'Kevin Malone', 'Cashier', 29000.00, TO_DATE('2023-03-10', 'YYYY-MM-DD'));

1 row created.

SQL>
SQL> INSERT INTO Order_Details VALUES (1, 1, TO_DATE('2024-01-10', 'YYYY-MM-DD'), 10.50);

1 row created.

SQL> INSERT INTO Order_Details VALUES (2, 2, TO_DATE('2024-01-12', 'YYYY-MM-DD'), 15.20);

1 row created.

SQL> INSERT INTO Order_Details VALUES (3, 3, TO_DATE('2024-02-01', 'YYYY-MM-DD'), 20.80);

1 row created.

SQL> INSERT INTO Order_Details VALUES (4, 4, TO_DATE('2024-02-05', 'YYYY-MM-DD'), 30.00);

1 row created.

SQL> INSERT INTO Order_Details VALUES (5, 5, TO_DATE('2024-02-10', 'YYYY-MM-DD'), 25.50);

1 row created.
```

```
SQL>
SQL> SELECT * FROM Customer WHERE address IN ('New York', 'Los Angeles');

CUSTOMER_ID
-----
NAME
-----
EMAIL
-----
PHONE
-----
ADDRESS
-----
1
Alice Johnson
alice@gmail.com

CUSTOMER_ID
-----
NAME
-----
EMAIL
-----
PHONE
-----
ADDRESS
-----
9876543210
New York

CUSTOMER_ID
-----
NAME
-----
EMAIL
-----
PHONE
-----
ADDRESS
-----
2
Bob Smith
bob@yahoo.com

CUSTOMER_ID
-----
NAME
-----
EMAIL
-----
```

```
SQL>
SQL> SELECT * FROM Customer WHERE address IN ('New York', 'Los Angeles');

CUSTOMER_ID
-----
NAME
-----
EMAIL
-----
PHONE
-----
ADDRESS
-----
1
Alice Johnson
alice@gmail.com

CUSTOMER_ID
-----
NAME
-----
EMAIL
-----
PHONE
-----
ADDRESS
-----
9876543210
New York

CUSTOMER_ID
-----
NAME
-----
EMAIL
-----
PHONE
-----
ADDRESS
-----
2
Bob Smith
bob@yahoo.com

CUSTOMER_ID
-----
NAME
-----
EMAIL
-----
```

Bob Smith  
bob@yahoo.com

CUSTOMER\_ID

NAME

EMAIL

PHONE

ADDRESS

9123456789  
Los Angeles

CUSTOMER\_ID

NAME

EMAIL

PHONE

ADDRESS

5  
Amy Adams  
amy@hotmail.com

CUSTOMER\_ID

NAME

EMAIL

PHONE

ADDRESS

7654321098  
New York

SQL> SELECT \* FROM Product WHERE category IN ('Dairy', 'Bakery');

PRODUCT\_ID

NAME

```
SQL> SELECT * FROM Product WHERE category IN ('Dairy', 'Bakery');
```

```
PRODUCT_ID
```

```
NAME
```

```
CATEGORY
```

```
PRICE STOCK_QUANTITY
```

```
1
Milk
Dairy 2.5 50
```

```
2
Bread
Bakery 1.8 30
```

```
PRODUCT_ID
```

```
NAME
```

```
CATEGORY
```

```
PRICE STOCK_QUANTITY
```

```
3
Eggs
Dairy 3.2 40
```

```
6
Croissant
```

```
PRODUCT_ID
```

```
NAME
```

```
CATEGORY
```

```
PRICE STOCK_QUANTITY
```

```
Bakery 2.5 25
```

```
SQL> SELECT * FROM Employee WHERE hire_date BETWEEN TO_DATE('2021-01-01', 'YYYY-MM-DD') AND TO_DATE('2023-12-31', 'YYYY-MM-DD');
```

```
EMPLOYEE_ID
```

```
NAME
```

```
ROLE
```

```
SALARY HIRE_DATE
```

```
2
Jim Halpert
Cashier 30000 15-AUG-21
```



```
      3
Pam Beesly
Sales Associate                28000 20-FEB-22
```

```
EMPLOYEE_ID
```

```
NAME
```

```
ROLE
```

```
SALARY HIRE_DATE
```

```
      5
Kevin Malone
Cashier                      29000 10-MAR-23
```

```
SQL> SELECT * FROM Customer WHERE name LIKE 'A%';
```

```
CUSTOMER_ID
```

```
NAME
```

```
EMAIL
```

```
PHONE
```

```
ADDRESS
```

```
      1
Alice Johnson
alice@gmail.com
```

```
CUSTOMER_ID
```

```
NAME
```

```
EMAIL
```

```
PHONE
```

```
ADDRESS
```

```
9876543210
New York
```

```
CUSTOMER_ID
```

```
NAME
```

```
-----
NAME
-----
EMAIL
-----
PHONE
-----
ADDRESS
-----
7654321098
New York
```

```
SQL> SELECT * FROM Order_Details WHERE order_date BETWEEN TO_DATE('2024-02-01', 'YYYY-MM-DD') AND TO_DATE('2024-02-29', 'YYYY-MM-DD');
```

ORDER_ID	CUSTOMER_ID	ORDER_DAT	TOTAL_AMOUNT
3	3	01-FEB-24	20.8
4	4	05-FEB-24	30
5	5	10-FEB-24	25.5

```
SQL> SELECT COUNT(*) FROM Customer;
```

COUNT(*)
5

```
SQL> SELECT AVG(price) FROM Product;
```

AVG(PRICE)
3.11666667

```
SQL> SELECT MAX(salary) FROM Employee;
```

MAX(SALARY)
75000

```
SQL> SELECT SUM(total_amount) FROM Order_Details;
```

SUM(TOTAL_AMOUNT)
102

```
SQL> SELECT MIN(stock_quantity) FROM Product;
```

MIN(STOCK_QUANTITY)
20

```
SQL>
SQL> CREATE TABLE Customer (
2     customer_id NUMBER PRIMARY KEY,
3     name VARCHAR2(100),
4     email VARCHAR2(100),
5     phone VARCHAR2(15),
6     address VARCHAR2(100)
7 );
```

Table created.

```
SQL>
SQL> CREATE TABLE Product (
2     product_id NUMBER PRIMARY KEY,
3     name VARCHAR2(100),
4     category VARCHAR2(50),
5     price NUMBER(10,2),
6     stock_quantity NUMBER
7 );
```

Table created.

```
SQL>
SQL> CREATE TABLE Employee (
2     employee_id NUMBER PRIMARY KEY,
3     name VARCHAR2(100),
4     role VARCHAR2(50),
5     salary NUMBER(10,2),
6     hire_date DATE
7 );
```

Table created.

```
SQL>
SQL> CREATE TABLE Order_Details (
2     order_id NUMBER PRIMARY KEY,
3     customer_id NUMBER,
4     order_date DATE,
5     total_amount NUMBER(10,2),
6     FOREIGN KEY (customer_id) REFERENCES Customer(customer_id)
7 );
```

Table created.