K.Maniteja-2403A53045

BATCH-24BTCAICYB02

Table Name: Products

Fields: Product_ID,ProductName,Category,ManufactureDate,Quantity,PricePerUnit,Status

Queries:

1. Create the schema/structure for the Products table.

```
SQL> create table Products (Product_ID int,ProductName Char(50),Category Char(50),ManufactureDate DATE,Quantity Int,PricePerUnit float,Status Char(20));

Table created.
```

2. Insert at least 7 records into the Products table.

```
SQL> INSERT INTO Products (Product_ID, ProductName, Category, ManufactureDate, Quantity, PricePerUnit, Status)
  2  VALUES (101, 'Laptop Pro 15', 'Electronics', DATE '2024-02-15', 25, 65000.00, 'In Stock');

1 row created.

SQL> INSERT INTO Products (Product_ID, ProductName, Category, ManufactureDate, Quantity, PricePerUnit, Status)
  2  VALUES (102, 'Office Chair Model X', 'Furniture', DATE '2023-10-10', 12, 8500.00, 'In Stock');

1 row created.

SQL> INSERT INTO Products (Product_ID, ProductName, Category, ManufactureDate, Quantity, PricePerUnit, Status)
  2  VALUES (103, 'Wireless Headphones', 'Electronics', DATE '2024-05-22', 50, 2200.00, 'In Stock');

1 row created.

SQL> INSERT INTO Products (Product_ID, ProductName, Category, ManufactureDate, Quantity, PricePerUnit, Status)
  2  VALUES (104, 'Coffee Table', 'Furniture', DATE '2022-11-05', 8, 4500.00, 'Out of Stock');

1 row created.

SQL> INSERT INTO Products (Product_ID, ProductName, Category, ManufactureDate, Quantity, PricePerUnit, Status)
  2  VALUES (105, 'Smartphone Z20', 'Electronics', DATE '2024-03-10', 30, 30000.00, 'In Stock');

1 row created.

SQL> INSERT INTO Products (Product_ID, ProductName, Category, ManufactureDate, Quantity, PricePerUnit, Status)
  2  VALUES (106, 'Gaming Mouse', 'Electronics', DATE '2023-12-01', 15, 2500.00, 'In Stock');

1 row created.

SQL> INSERT INTO Products (Product_ID, ProductName, Category, ManufactureDate, Quantity, PricePerUnit, Status)
  2  VALUES (107, 'Air Purifier', 'Home Appliances', DATE '2024-04-15', 18, 12500.00, 'In Stock');

1 row created.

SQL>
```

3. Retrieve the ProductName, Category, and Quantity of all products.

```
SQL> SELECT ProductName, Category, Quantity
  2  from Products;

PRODUCTNAME
--------------------------------------------------
CATEGORY                                           QUANTITY
-------------------------------------------------- ----------
Laptop Pro 15
Electronics                                                25

Office Chair Model X
Furniture                                                  12

Wireless Headphones
Electronics                                                50


PRODUCTNAME
--------------------------------------------------
CATEGORY                                           QUANTITY
-------------------------------------------------- ----------
Coffee Table
Furniture                                                   8

Smartphone Z20
Electronics                                                30

Gaming Mouse
Electronics                                                15


PRODUCTNAME
--------------------------------------------------
CATEGORY                                           QUANTITY
-------------------------------------------------- ----------
Air Purifier
Home Appliances                                            18


7 rows selected.

SQL>
```

4. Retrieve the products manufactured after 2024-01-01.

```
SQL> SELECT *
  2  FROM Products
  3  WHERE ManufactureDate > DATE '2024-01-01';

PRODUCT_ID PRODUCTNAME
---------- --------------------------------------------------
CATEGORY                                           MANUFACTU   QUANTITY
-------------------------------------------------- --------- ----------
PRICEPERUNIT STATUS
------------ --------------------
       101 Laptop Pro 15
Electronics                                        15-FEB-24         25
       65000 In Stock

       103 Wireless Headphones
Electronics                                        22-MAY-24         50
        2200 In Stock

PRODUCT_ID PRODUCTNAME
---------- --------------------------------------------------
CATEGORY                                           MANUFACTU   QUANTITY
-------------------------------------------------- --------- ----------
PRICEPERUNIT STATUS
------------ --------------------

       105 Smartphone Z20
Electronics                                        10-MAR-24         30
       30000 In Stock

       107 Air Purifier
Home Appliances                                    15-APR-24         18

PRODUCT_ID PRODUCTNAME
---------- --------------------------------------------------
CATEGORY                                           MANUFACTU   QUANTITY
-------------------------------------------------- --------- ----------
PRICEPERUNIT STATUS
------------ --------------------
       12500 In Stock
```

5. Retrieve the Product_ID and ProductName where the Status is "In Stock".

```
SQL> SELECT Product_ID, ProductName
  2  FROM Products
  3  WHERE Status = 'In Stock';

PRODUCT_ID PRODUCTNAME
---------- --------------------------------------------------
       101 Laptop Pro 15
       102 Office Chair Model X
       103 Wireless Headphones
       105 Smartphone Z20
       106 Gaming Mouse
       107 Air Purifier

6 rows selected.

SQL>
```

6. Update the Status to "Out of Stock" for the product with Product_ID = 105.

```
SQL> UPDATE Products
  2  SET Status = 'Out of Stock'
  3  WHERE Product_ID = 105;

1 row updated.

SQL>
```

7. Add a new column called TotalValue and calculate it as Quantity * PricePerUnit for all rows.

```
SQL> ALTER TABLE Products
  2  ADD TotalValue DECIMAL(15, 2);

Table altered.

SQL>
SQL> UPDATE Products
  2  SET TotalValue = Quantity * PricePerUnit;

7 rows updated.

SQL>
```

8. Delete products where the Quantity is less than 10.

```
SQL> DELETE FROM Products
  2  WHERE Quantity < 10;

1 row deleted.
```

9. Increase the PricePerUnit by 8% for products where the Category is "Electronics".

```
SQL> UPDATE Products
  2  SET PricePerUnit = PricePerUnit * 1.08
  3  WHERE Category = 'Electronics';

4 rows updated.
```

10. Delete all products where the Status is "Discontinued".

```
SQL> DELETE FROM Products
  2  WHERE Status = 'Discontinued';

0 rows deleted.
```

Note: The name of the Products table should be as Products followed by last 4 digits of your roll number.(ex:Products1537).

Sample Output:

Screenshot should contain the system time as present below

For every query the output screen must be pasted.

Sample Output:

1. Create the schema/structure for the Orders table.

```
SQL> create table orders_C0(oid int,oname char(10));

Table created.

SQL> desc orders_c0;
 Name                                      Null?    Type
 ----------------------------------------- -------- ----------------------------
 OID                                                NUMBER(38)
 ONAME                                              CHAR(10)
```

2. Insert at least 7 records into the Orders table.

```
SQL> insert into orders_C0 values(1,'mobile');

1 row created.
```