YAMUNA DAY8 ASSIGNMENTS:

```
/* 1.Create view vw_updatable_products.
Try updating the view with the below query and see if the product table also gets updated.
Update query:
UPDATE updatable_products
SET unit_price = unit_price * 1.1
WHERE units_in_stock < 10;
*/
Select product_id,
product_name,
             unit_price,
             units_in_stock
From products
Where units_in_stock < 10
order by unit_price;
Create View vw_updatable_products As
Select product_id,
             product_name,
             unit_price,
             units_in_stock
From products;
```

Data Output Messages Notifications

CREATE VIEW

Query returned successfully in 37 msec.

Update vw_updatable_products

Set unit_price = unit_price * 1.1

Where units_in_stock < 10;

```
33 v Update vw_updatable_products
34 Set unit_price = unit_price * 1.1
35 Where units_in_stock < 10;
36
37
```

Data Output Messages Notifications

UPDATE 12

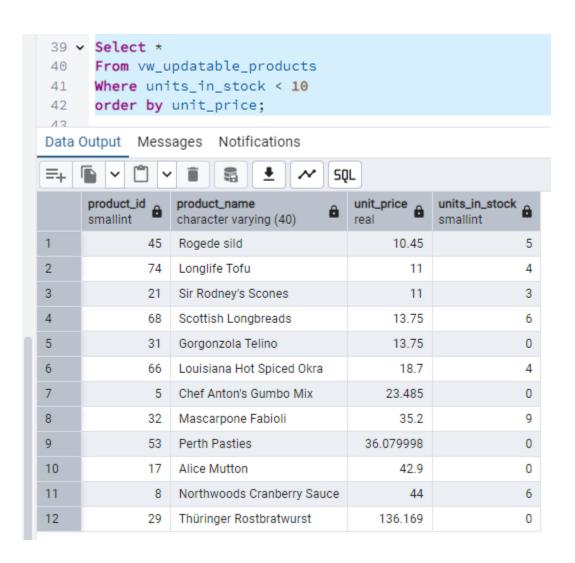
Query returned successfully in 35 msec.

Select *

From vw_updatable_products

Where units_in_stock < 10

order by unit_price;



```
Select product_id,

product_name,

unit_price,

units_in_stock
```

From products

Where units_in_stock < 10 order by unit_price;

```
Select product_id,
46
       product_name,
                 unit_price,
47
                 units_in_stock
48
       From products
49
       Where units_in_stock < 10
50
       order by unit_price;
51
52
53
Data Output Messages Notifications
                                            SQL
=+
                                                unit_price
      product_id
                     product_name
                                                             units_in_stock
      [PK] smallint
                     character varying (40)
                                                 real
                                                             smallint
1
                 45
                      Rogede sild
                                                      10.45
                                                                           5
2
                 74
                      Longlife Tofu
                                                         11
                                                                           4
3
                 21
                     Sir Rodney's Scones
                                                         11
                                                                           3
4
                 68
                      Scottish Longbreads
                                                      13.75
                                                                           6
5
                 31
                     Gorgonzola Telino
                                                      13.75
                                                                           0
                                                       18.7
6
                 66
                      Louisiana Hot Spiced Okra
                                                                           4
7
                  5 Chef Anton's Gumbo Mix
                                                     23.485
                                                                           0
8
                 32
                     Mascarpone Fabioli
                                                       35.2
                                                                           9
9
                 53
                      Perth Pasties
                                                  36.079998
                                                                           0
10
                 17
                     Alice Mutton
                                                       42.9
                                                                           0
11
                  8
                      Northwoods Cranberry Sauce
                                                         44
                                                                           6
12
                 29
                      Thüringer Rostbratwurst
                                                    136.169
                                                                           0
```

/* 2.Transaction:

Update the product price for products by 10% in category id=1

Try COMMIT and ROLLBACK and observe what happens.*/

-- select * from products;

SELECT * FROM products WHERE category_id = 1 order by unit_price;



Begin;

Update products

Set unit_price = unit_price * 1.10

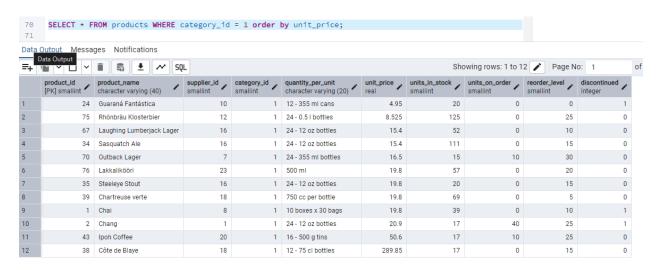
Where category_id = 1;

```
Begin;
66 V Update products
67 Set unit_price = unit_price * 1.10
68 Where category_id = 1;
69 Data Output Messages Notifications

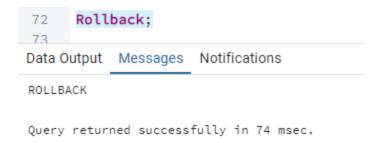
UPDATE 12
```

Query returned successfully in 50 msec.

SELECT * FROM products WHERE category_id = 1 order by unit_price;



We can observe the updated prices, but the change is not permanent yet Rollback;



SELECT * FROM products WHERE category_id = 1 order by unit_price;



We can see original prices, since the transaction was rolled back

Commit;

Commit makes the updated price permanent in the data base.

/* 3.Create a regular view which will have the details below (Need to do joins):

Employee_id,

Employee_full_name,

Title,

```
Territory_id,
territory_description,
region_description*/
-- select * from employees;
-- select * from territories;
-- select * from employee_territories;
--Drop View vw_Employee_details;
Create View vw_Employee_details As
Select
       e.Employee_id,
       CONCAT(e.first_name, '', e.last_name) As Employee_full_name,
       e.Title,
      t.Territory_id,
       t.territory_description,
       r.region_description
From employees e
Join employee_territories et On e.employee_id = et.employee_id
Join territories t on et.territory_id = t.territory_id
Join region r on t.region_id = r.region_id;
select * from vw_Employee_details;
```

```
93 v Create View vw_Employee_details As
94 Select
95
            e.Employee_id,
            CONCAT(e.first_name, ' ' , e.last_name) As Employee_full_name,
96
97
            e.Title,
98
            t.Territory_id,
99
            t.territory_description,
            r.region_description
100
101
       From employees e
102
       Join employee_territories et On e.employee_id = et.employee_id
103
       Join territories t on et.territory_id = t.territory_id
104
       Join region r on t.region_id = r.region_id;
105
106
107
       select * from vw_Employee_details;
Data Output Messages Notifications
                                        Notifications
=+
                                #
                                                                                                                         Showing ro
                          S
      employee_id
                     employee_full_name
                                                                 territory_id
                                                                                       territory_description
                                                                                                              region_description
                                          title
                                                                                       character varying (60)
                                          character varying (30)
                                                                character varying (20)
                                                                                                              character varying (60)
      smallint
                     text
                                          Sales Representative
                                                                 06897
                     Nancy Davolio
                                                                                        Wilton
                                                                                                              Eastern
2
                                                                 19713
                     Nancy Davolio
                                          Sales Representative
                                                                                       Neward
                                                                                                              Eastern
3
                     Andrew Fuller
                                           Vice President, Sales
                                                                 01581
                                                                                        Westboro
                                                                                                              Fastern
4
                                                                 01730
                                                                                        Bedford
                  2
                     Andrew Fuller
                                          Vice President, Sales
                                                                                                              Fastern
5
                  2
                     Andrew Fuller
                                           Vice President, Sales
                                                                 01833
                                                                                        Georgetow
                                                                                                              Eastern
6
                     Andrew Fuller
                                          Vice President, Sales
                                                                 02116
                                                                                       Boston
                                                                                                              Eastern
                  2
                                                                 02139
                     Andrew Fuller
                                          Vice President, Sales
                                                                                        Cambridge
                                                                                                              Eastern
                     Andrew Fuller
                                          Vice President, Sales
                                                                 02184
                                                                                        Braintree
                                                                                                              Eastern
                                                                 40222
                  2
                     Andrew Fuller
                                          Vice President, Sales
                                                                                        Louisville
                                                                                                              Eastern
10
                     Janet Leverling
                                          Sales Representative
                                                                 30346
                                                                                        Atlanta
                                                                                                              Southern
11
                     Janet Leverling
                                          Sales Representative
                                                                 31406
                                                                                        Savannah
                                                                                                              Southern
12
                     Janet Leverling
                                          Sales Representative
                                                                 32859
                                                                                        Orlando
                                                                                                              Southern
```

33607

Tampa

Southern

/* 4.Create a recursive CTE based on Employee Hierarchy*/

--Select employee_id, first_name, reports_to From employees;

Sales Representative

With Recursive cte_employee_hierarchy

Janet Leverling

AS(

Select

employee_id,

```
first_name,
      last_name,
      reports_to,
      0 As Level
From employees e
Where reports_to Is Null
Union All
Select
      e.employee_id,
      e.first_name,
      e.last_name,
      e.reports_to,
      eh.level+1
From employees e
Join cte_employee_hierarchy eh
On eh.employee_id = e.reports_to
)
Select Level, employee_id, concat(first_name, '', last_name) as employee_name
From cte_employee_hierarchy
Order By level, employee_id;
```

4. Create a recursive CTE based on Employee Hierarchy

