Day 8

1. Create view vw_updatable_products (use same query whatever I used in the training)

Try updating view with 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;

```
8 v Select product_id,
 9
       product_name,
                 unit_price,
10
                 units_in_stock
11
12
       From products
13
       Where units_in_stock < 10
14
       order by unit_price;
15
16
17 v Create View vw_updatable_products As
18
       Select product_id,
19
                 product_name,
20
                 unit_price,
21
                 units_in_stock
       From products;
22
23
24 Update vw_updatable_products
25
       Set unit_price = unit_price * 1.1
26
       Where units_in_stock < 10;</pre>
 29 Select *
     From vw_updatable_products
      Where units_in_stock < 10
     order by unit_price;
 33
 34 v Select product_id,
 35
     product_name,
 36
             unit_price,
 37
             units_in_stock
 38
     From products
 39
      Where units_in_stock < 10
      order by unit_price;
Data Output Messages Notifications
    $ ₹ ~
                                     unit_price
                 product_name
     product_id
                                               units_in_stock
     [PK] smallint
                 character varying (40)
                                                smallint
1
             45 Rogede sild
                                          10.45
                                                          5
2
              74 Longlife Tofu
                                                          4
3
                 Sir Rodney's Scones
                                            11
                                                          3
4
                 Scottish Longbreads
                                           13.75
                                                          6
                                                          0
5
                                          13.75
              31
                 Gorgonzola Telino
6
              66 Louisiana Hot Spiced Okra
                                           187
                                                          4
7
                 Chef Anton's Gumbo Mix
                                          23.485
                                                          0
8
              32 Mascarpone Fabioli
                                           35.2
                                                          9
9
                 Perth Pasties
                                       36.079998
                                                          0
10
                 Alice Mutton
                                                          0
11
                                                          6
                 Northwoods Cranberry Sauce
                                            44
            Query complete 00:00:00.144
Total rows: 12
```

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 WHERE category_id = 1 order by unit_price;
49
50
     Begin:
51
52 v Update products
     Set unit_price = unit_price * 1.10
53
     Where category_id = 1;
54
55
     SELECT * FROM products WHERE category_id = 1 order by unit_price;
56
57
     Rollback;
58
59
     SELECT * FROM products WHERE category_id = 1 order by unit_price;
60
61
     Commit;
62
```



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

Employee_id,

Employee_full_name,

Title,

Territory_id,

territory_description,

region_description

```
79 ∨ Create View vw_Employee_details As
80
     Select
81
         e.Employee_id,
         CONCAT(e.first_name, ' ' , e.last_name) As Employee_full_name,
82
83
         e.Title,
         t.Territory_id,
84
         t.territory_description,
85
         r.region_description
86
     From employees e
87
     Join employee_territories et On e.employee_id = et.employee_id
88
     Join territories t on et.territory_id = t.territory_id
89
     Join region r on t.region_id = r.region_id;
90
91
     select * from vw_Employee_details;
92
```

Data Output Messages Notifications							
=+	<u> </u>		sqL				
	employee_id smallint	employee_full_name text	title character varying (30)	territory_id character varying (20)	territory_description character varying (60)	region_description character varying (60)	
1	1	Nancy Davolio	Sales Representative	06897	Wilton	Eastern	
2	1	Nancy Davolio	Sales Representative	19713	Neward	Eastern	
3	2	Andrew Fuller	Vice President, Sales	01581	Westboro	Eastern	
4	2	Andrew Fuller	Vice President, Sales	01730	Bedford	Eastern	
5	2	Andrew Fuller	Vice President, Sales	01833	Georgetow	Eastern	
6	2	Andrew Fuller	Vice President, Sales	02116	Boston	Eastern	
7	2	Andrew Fuller	Vice President, Sales	02139	Cambridge	Eastern	
8	2	Andrew Fuller	Vice President, Sales	02184	Braintree	Eastern	
9	2	Andrew Fuller	Vice President, Sales	40222	Louisville	Eastern	
10	3	Janet Leverling	Sales Representative	30346	Atlanta	Southern	
11	3	Janet Leverling	Sales Representative	31406	Savannah	Southern	
Total	rows: 49 Q	uery complete 00:00:00	.095	00050	0-11-	O	

4. Create a recursive CTE based on Employee Hierarchy

```
99 with Recursive cte_employee_hierarchy
 100
     AS(
       Select
 101
 102
           employee_id,
 103
          first_name,
 104
          last_name,
 105
          reports_to,
 106
           0 As Level
 107
      From employees e
      Where reports_to Is Null
 108
 109
 110
      Union All
 111
 112
      Select
 113
         e.employee_id,
 114
          e.first_name,
 115
          e.last_name,
          e.reports_to,
 116
          eh.level+1
 117
     From employees e
 118
      Join cte_employee_hierarchy eh
 119
 120
       On eh.employee_id = e.reports_to
 121
 122
       Select Level, employee_id, concat(first_name, ' ' , last_name) as employee_name
 123
 124
      From cte_employee_hierarchy
125 Order By level, employee_id;
Data Output Massages Notifications
```

Data Output Messages Notifications					
=+		 	♣ ~ [SQL]		
	level integer	employee_id smallint	employee_name text		
1	0	2	Andrew Fuller		
2	1	1	Nancy Davolio		
3	1	3	Janet Leverling		
4	1	4	Margaret Peacock		
5	1	5	Steven Buchanan		
6	1	8	Laura Callahan		
7	2	6	Michael Suyama		
8	2	7	Robert King		
9	2	9	Anne Dodsworth		

Total rows: 9 Query complete 00:00:00.076