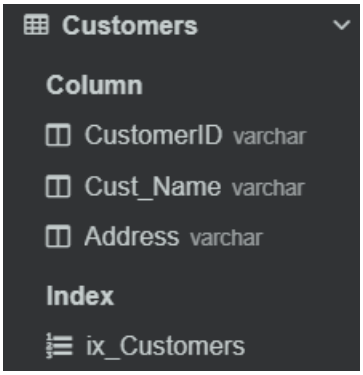
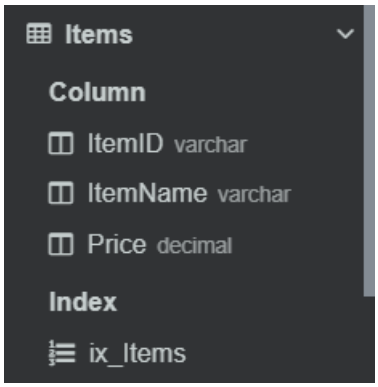
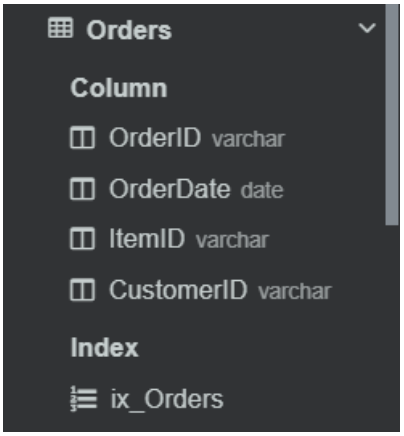
GACILO, ARIEL JERICKO
BSIT A501
ADVANCED DATABASE SYSTEMS
02 HANDS-ON ACTIVITY 1








```
1 CREATE INDEX ix_Customers ON Customers(CustomerID, Cust_Name)
2 CREATE INDEX ix_Orders ON Orders(OrderID, CustomerID)
3 CREATE INDEX ix_Items ON Items(ItemID, ItemName)
```

CREATING INDEXES (CUSTOMER, ITEMS, ORDERS)

MS SQL

```
1  SELECT Customers.Cust_Name, Items.ItemName, Items.Price
2  FROM Orders
3  INNER JOIN Items ON Items.ItemID = Orders.ItemID
4  INNER JOIN Customers ON Customers.CustomerID = Orders.CustomerID
5  WHERE Items.Price > (
6  SELECT Items.Price FROM Orders
7  INNER JOIN Items ON Items.ItemID = Orders.ItemID
8  INNER JOIN Customers ON Customers.CustomerID = Orders.CustomerID
9  WHERE Customers.Cust_Name = 'Badang'
10 )
11 ORDER BY Items.Price ASC
```

Cust_Name	ItemName	Price
Roger	LG V40	15000
Layla	LG V40	15000
Chou	LG V50	23000
Miya	LG V50	23000
Miya	Huawei P30	29000
Layla	Huawei P30	29000
Chou	Huawei P30	29000
Lilia	Huawei Mate30	31000
Miya	Huawei Mate30	31000
Hanzo	Samsung S9	32000
Lesley	Samsung S10	40000

Creating subquery that will return the customer who purchased an item that is more expensive than Badangs.

```
SELECT 'Lab_' + Orders.OrderID AS 'New OrderID', Customers.Cust_Name, Customers.Address, Items.ItemName, Items.Price FROM Orders
INNER JOIN Items ON Items.ItemID = Orders.ItemID
INNER JOIN Customers ON Customers.CustomerID = Orders.CustomerID
WHERE Items.Price  > (
SELECT Items.Price FROM Orders
INNER JOIN Items ON Items.ItemId = Orders.ItemID
INNER JOIN Customers ON Customers.CustomerID = Orders.CustomerID
WHERE Customers.Cust_Name = 'Badang'
)
ORDER BY Items.Price ASC
```

New OrderID	Cust_Name	Address	ItemName	Price
Lab_OR-6	Roger	Baguio	LG V40	15000
Lab_OR-21	Layla	Laguna	LG V40	15000
Lab_OR-4	Chou	Navotas	LG V50	23000
Lab_OR-9	Miya	Taguig	LG V50	23000
Lab_OR-2	Miya	Taguig	Huawei P30	29000
Lab_OR-10	Layla	Laguna	Huawei P30	29000
Lab_OR-18	Chou	Navotas	Huawei P30	29000
Lab_OR-8	Lilia	Rizal	Huawei Mate30	31000
Lab_OR-12	Miya	Taguig	Huawei Mate30	31000
Lab_OR-15	Hanzo	Taguig	Samsung S9	32000
Lab_OR-7	Lesley	Laguna	Samsung S10	40000

Create a subquery in the Select clause that will add a temporary column named 'New OrderID' and modify the returning character/text of OrderId to 'Lab_OR-##'

MS SQL

```
CREATE VIEW Subqueries_View
AS SELECT 'Lab_' + Orders.OrderID AS 'New OrderID', Customers.Cust_Name, Customers.Address, Items.ItemName, Items.Price FROM Orders
INNER JOIN Items ON Items.ItemID = Orders.ItemID
INNER JOIN Customers ON Customers.CustomerID = Orders.CustomerID
WHERE Items.Price  > (
SELECT Items.Price FROM Orders
INNER JOIN Items ON Items.ItemId = Orders.ItemID
INNER JOIN Customers ON Customers.CustomerID = Orders.CustomerID
WHERE Customers.Cust_Name = 'Badang'
)
SELECT * FROM Subqueries_View
WHERE Address
IN ('Laguna', 'Taguig', 'Navotas')
```

New OrderID	Cust_Name	Address	ItemName	Price
Lab_OR-2	Miya	Taguig	Huawei P30	29000
Lab_OR-4	Chou	Navotas	LG V50	23000
Lab_OR-7	Lesley	Laguna	Samsung S10	40000
Lab_OR-9	Miya	Taguig	LG V50	23000
Lab_OR-10	Layla	Laguna	Huawei P30	29000
Lab_OR-12	Miya	Taguig	Huawei Mate30	31000
Lab_OR-15	Hanzo	Taguig	Samsung S9	32000
Lab_OR-18	Chou	Navotas	Huawei P30	29000
Lab_OR-21	Layla	Laguna	LG V40	15000

Using IN operator, create a query that retrieves all the data with returning addresses Laguna, Taguig and Navotas from the newly created view.