

**NIM : 13323033**

**Nama : Agus Pranata Marpaung**

**Kelas : 31TK2**

## LAPORAN PRAKTIKUM

### Tugas 1

Silahkan buat query untuk tampilan yang diberikan.

1. Menampilkan semua data customer. **93 rows**

#### Tampilan yang diharapkan

CustomerID	CompanyName	ContactName	ContactTitle	Address
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57
ANATR	Ana Trujillo Emparedados y helados	Ana Trujillo	Owner	Avda. de la Constitucion 2222
ANTON	Antonio Moreno Taquera	Antonio Moreno	Owner	Mataderos 2312
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.
BERGS	Berglunds snabbkp	Christina Berglund	Order Administrator	Berguvsvgen 8
BLAUS	Blauer See Delikatessen	Hanna Moos	Sales Representative	Forsterstr. 57
BLONP	Blondesddsl pre et fils	Frdrique Citeaux	Marketing Manager	24, place Klber
BOLID	Bolid Comidas preparadas	Martn Sommer	Owner	C/ Araquil, 67
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers
BOTIM	Bottom-Dollar Markets	Elizabeth Lincoln	Accounting Manager	23 Tsawassen Blvd.

#### Query

```
SELECT * FROM customers;
```

2. Menampilkan 5 data paling atas semua data customer yang tinggal di negara Brazil. **5 rows**

#### Tampilan yang diharapkan

CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region	PostalCode	Country
COMMI	Comrcio Mineiro	Pedro Afonso	Sales Associate	Av. dos Lusadas, 23	Sao Paulo	SP	05432-043	Brazil
FAMIA	Familia Arquibaldo	Aria Cruz	Marketing Assistant	Rua Ors, 92	Sao Paulo	SP	05442-030	Brazil
GOURL	Gourmet Lanchonetes	Andr Fonseca	Sales Associate	Av. Brasil, 442	Campinas	SP	04876-786	Brazil
HANAR	Hanari Carnes	Mario Pontes	Accounting Manager	Rua do Pao, 67	Rio de Janeiro	RJ	05454-876	Brazil
QUEDE	Que Delcia	Bernardo Batista	Accounting Manager	Rua da Panificadora, 12	Rio de Janeiro	RJ	02389-673	Brazil

#### Query

```
SELECT * FROM customers WHERE Country = 'Brazil' LIMIT 5;
```

3. Menampilkan data customer yang huruf kedua contact name nya adalah huruf r. **5 rows**

Tampilan yang diharapkan						
CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region
BLONP	Blondesddl pre et fils	Frdrique Citeaux	Marketing Manager	24, place Klber	Strasbourg	(NULL)
CENTC	Centro comercial Moctezuma	Francisco Chang	Marketing Manager	Sierras de Granada 9993	Mxico D.F.	(NULL)
FAMIA	Familia Arquibaldo	Aria Cruz	Marketing Assistant	Rua Ors, 92	Sao Paulo	SP
LONEP	Lonesome Pine Restaurant	Fran Wilson	Sales Manager	89 Chiaroscuro Rd.	Portland	OR
SPLIR	Split Rail Beer & Ale	Art Braunschweiger	Sales Manager	P.O. Box 555	Lander	WY

**Query**

SELECT \* FROM customers WHERE SUBSTRING(ContactName, 2, 1) = 'r';

4. Menampilkan data customer yang tinggal di negara Germany baik di kota Berlin ataupun Munchen. **1 row**

Tampilan yang diharapkan								
CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region	PostalCode	Country
ALFKI	Alfreds Futterkiste	Maria Anders	Sales Representative	Obere Str. 57	Berlin	(NULL)	12209	Germany

**Query**

SELECT \* FROM customers WHERE Country = 'Germany' AND (City = 'Berlin' OR City = 'Munchen');

5. Menampilkan data customer dengan mengurutkan country dari yang terkecil hingga terbesar dan contact name nya dari yang terbesar hingga yang terkecil. **93 rows**

Tampilan yang diharapkan								
CustomerID	CompanyName	ContactName	ContactTitle	Address	City	Region	PostalCod	Country
Val2	IT	Val2	IT	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)
VALON	IT	Valon Hoti	IT	(NULL)	(NULL)	(NULL)	(NULL)	(NULL)
LAMAI	La maison d'Asie	Annette Roulet	Sales Manager	1 rue Alsace-Lorraine	Toulouse	(NULL)	31000	France
LAZYK	Lazy K Kountry Store	John Steel	Marketing Manager	12 Orchestra Terrace	Walla Wa.	WA	99362	USA
BONAP	Bon app'	Laurence Lebihan	Owner	12, rue des Bouchers	Marseill	(NULL)	13008	France
AROUT	Around the Horn	Thomas Hardy	Sales Representative	120 Hanover Sq.	London	(NULL)	WAL 1DP	UK
FOLIG	Folies gourmandes	Martine Ranc	Assistant Sales Agent	184, chausse de Tourna	Lille	(NULL)	59000	France
SAVEA	Save-a-lot Markets	Jose Pavarotti	Sales Representative	187 Suffolk Ln.	Boise	ID	83720	USA
LAUGB	Laughing Bacchus Wine C	Yoshi Tannamuri	Marketing Assistant	1900 Oak St.	Vancouve	BC	V3F 2K1	Canada
VICTE	Victuailles en stock	Mary Savelev	Sales Agent	2, rue du Commerce	Lyon	(NULL)	69004	France

**Query**

SELECT \* FROM customers ORDER BY Country ASC, ContactName DESC;

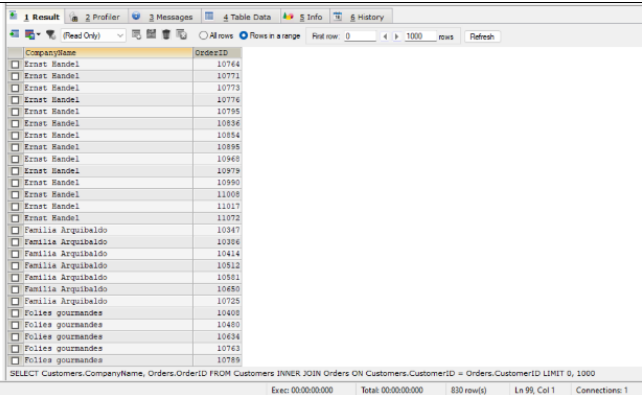
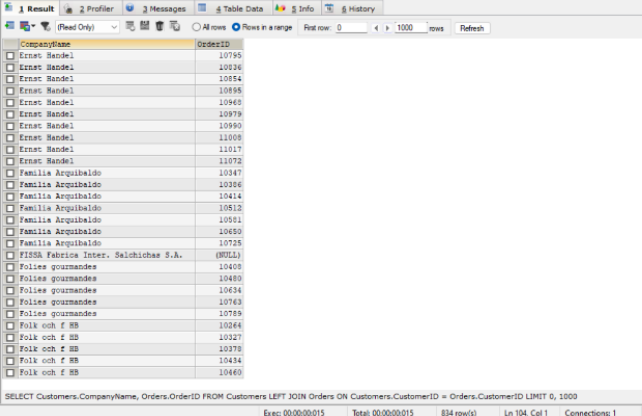
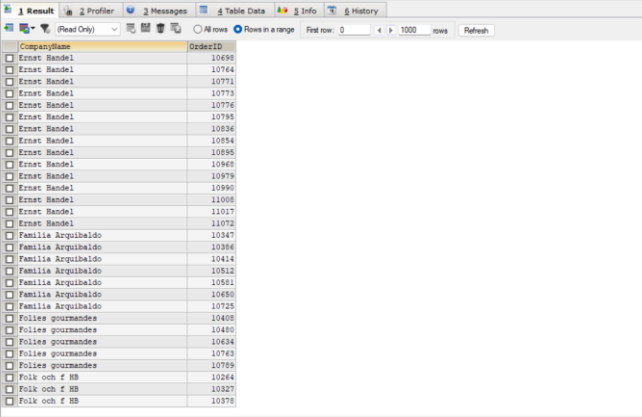
## Tugas 2

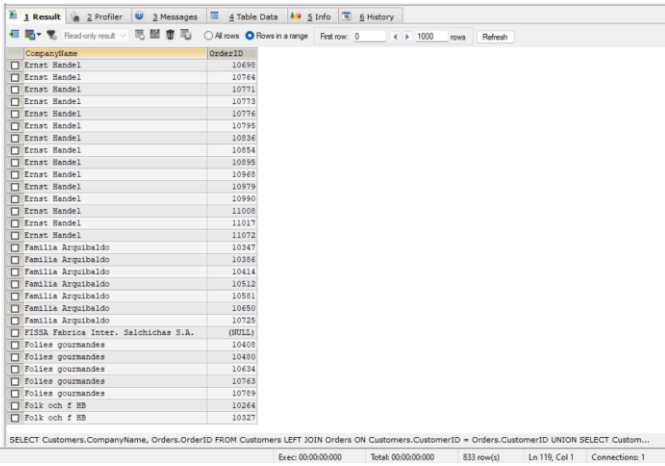
Silahkan berikan komentar anda terkait query yang diberikan pada modul.

No. Query	Kegunaan Query
1.	Untuk menampilkan field (kolom) OrderID dan Subtotal dan adanya sintaks query yang kurang. Berikut perbaikannya: SELECT OrderID, FORMAT(SUM(UnitPrice * Quantity * (1 - Discount)), 2) AS Subtotal FROM orderdetails GROUP BY OrderID ORDER BY OrderID;
2.	Untuk menampilkan field (kolom) OrderID, orderdate, dan contactname
3.	Untuk menampilkan field (kolom) OrderID, ContactName, dan OrderDate
4.	Untuk menampilkan field (kolom) ContactName dan OrderID
5.	Untuk menampilkan field (kolom) OrderID, LastName, dan FirstName
6.	Untuk menampilkan field (kolom) CustomerName1, CustomerName2, dan City
7.	Untuk menampilkan field (kolom) City dan Country
8.	Untuk menampilkan field (kolom) CompanyName dan NumberOfOrders dan adanya kesalahan sintaks query yaitu dibagian LEFT JOIN. Berikut perbaikannya: SELECT Shippers.CompanyName, COUNT(Orders.OrderID) AS NumberOfOrders FROM Orders LEFT JOIN Shippers ON Orders.ShipVia = Shippers.ShipperID GROUP BY Shippers.CompanyName;
9.	Untuk menampilkan field (kolom) LastName, NumberOfOrders
10.	Untuk menampilkan field (kolom) CompanyName
11.	Untuk menampilkan field (kolom) CompanyName dan OrderID dan adanya kesalahan sintaks query yaitu penggunaan FULL OUTER JOIN. Berikut perbaikannya: SELECT * FROM (SELECT Customers.CompanyName, Orders.OrderID FROM Customers LEFT JOIN Orders ON Customers.CustomerID = Orders.CustomerID UNION SELECT Customers.CompanyName, Orders.OrderID FROM Orders LEFT JOIN Customers ON Customers.CustomerID = Orders.CustomerID) AS Result ORDER BY Result.CompanyName;

### Tugas 3

Silahkan buat contoh lain untuk menunjukkan perbedaan beberapa sintaks JOIN, diantaranya adalah: Full Join, Inner Join, Left Join, Right Join, Cross Join berdasarkan data-data yang terdapat pada purchased.sql yang sudah diberikan.

Nama Join	Sintaks Lengkap	Tampilan
<b>INNER JOIN</b>	<pre>SELECT Customers.CompanyName, Orders.OrderID FROM Customers INNER JOIN Orders ON Customers.CustomerID = Orders.CustomerID;</pre>	
<b>LEFT JOIN</b>	<pre>SELECT Customers.CompanyName, Orders.OrderID FROM Customers LEFT JOIN Orders ON Customers.CustomerID = Orders.CustomerID;</pre>	
<b>RIGHT JOIN</b>	<pre>SELECT Customers.CompanyName, Orders.OrderID FROM Customers RIGHT JOIN Orders ON Customers.CustomerID = Orders.CustomerID;</pre>	

Nama Join	Sintaks Lengkap	Tampilan
<b>FULL JOIN</b>	SELECT Customers.CompanyName, Orders.OrderID FROM Customers LEFT JOIN Orders ON Customers.CustomerID = Orders.CustomerID UNION SELECT Customers.CompanyName, Orders.OrderID FROM Orders LEFT JOIN Customers ON Customers.CustomerID = Orders.CustomerID;	
<b>CROSS JOIN</b>	SELECT Customers.CompanyName, Products.ProductName FROM Customers CROSS JOIN Products;	