Soal Praktikum *Practicum Case*	BINUS UNIVERSITY
ISYS6028 Database Systems	
Teknik Informatika *Computer Science*	O221-ISYS6028-DW01-06
Periode Berlaku Mulai Semester Ganjil 2021/2022 ***Valid on*** *Odd Semester Year* 2021/2022	**Revisi 00** *Revision 00*

Learning Outcomes

- Apply database language and SQL Programming language

Topic

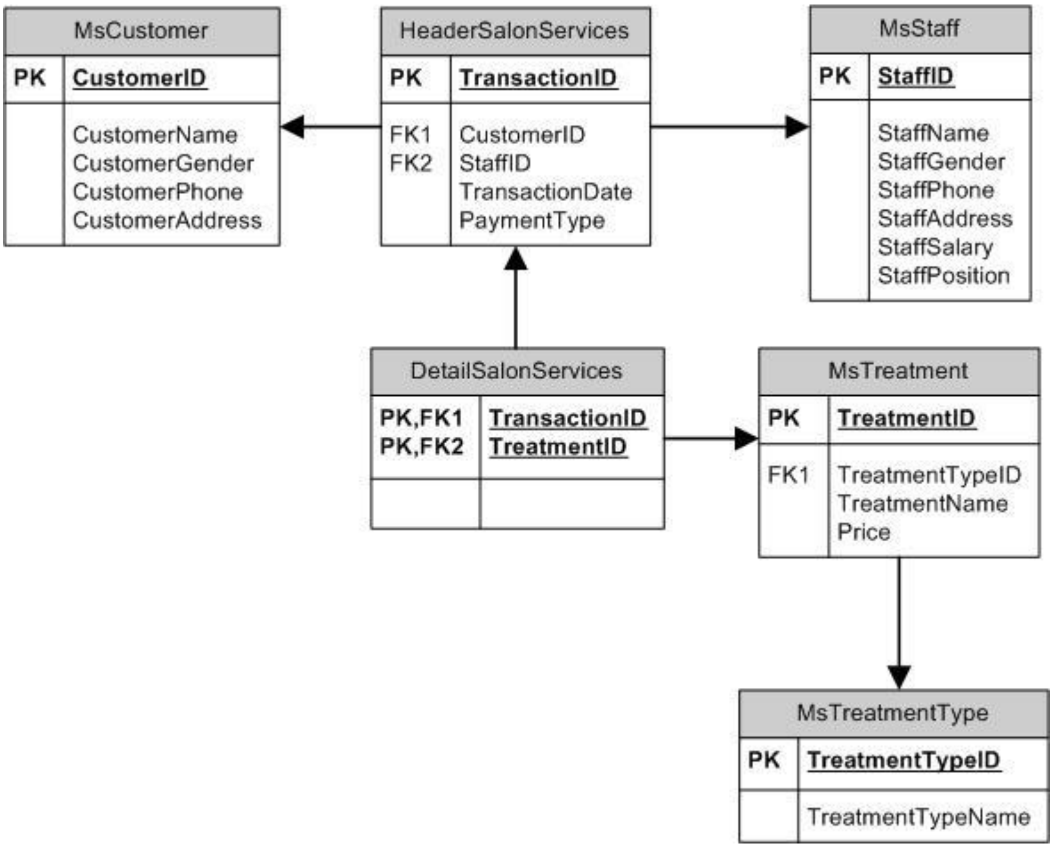
- Session 06 - SQL – Data Manipulation (4)

Sub Topics

- Inner Join
- Outer Join (LEFT JOIN, RIGHT JOIN, FULL JOIN)
- UNION

Tabel Relasional

Relational Table



Sintaks

Syntax

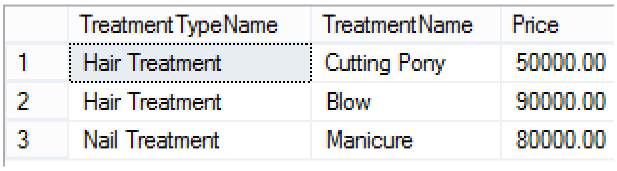
Join

```
SELECT { * | field_name [, …] }
FROM first_table [INNER | LEFT | RIGHT | FULL] JOIN second_table
ON first_table.keyfield = second_table.foreign_keyfield
```

Union

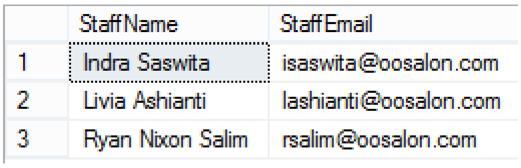
```
select_query1
{UNION | UNION ALL | INTERSECT | EXCEPT }
select_query2
```

1. Display TreatmentTypeName, TreatmentName, and Price for every treatment which name contains ‘hair’ or start with ‘nail’ word and has price below 100000.
   (**join**, **like**)



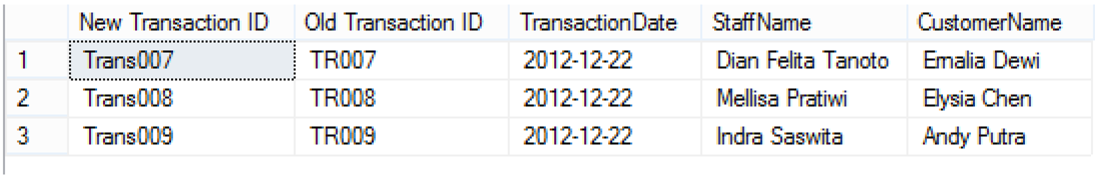
	TreatmentTypeName	TreatmentName	Price
1	Hair Treatment	Cutting Pony	50000.00
2	Hair Treatment	Blow	90000.00
3	Nail Treatment	Manicure	80000.00

2. Display StaffName and StaffEmail (obtained from the first character of staff’s name in lowercase format and followed with last word of staff’s name and ‘@oosalon.com’ word) for every staff who handle transaction on Thursday.The duplicated data must be displayed only once.
   (**distinct**, **lower**, **left**, **reverse**, **left**, **charindex**, **join**, **datename**, **weekday**, **like**)



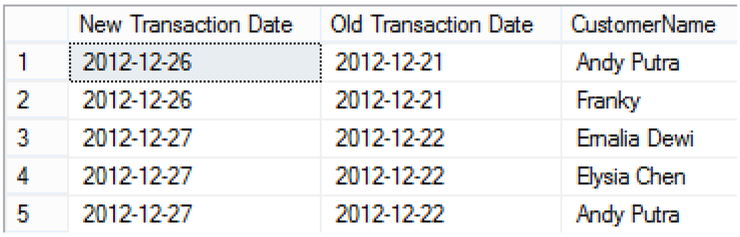
	StaffName	StaffEmail
1	Indra Saswita	isaswita@oosalon.com
2	Livia Ashianti	lashianti@oosalon.com
3	Ryan Nixon Salim	rsalim@oosalon.com

3. Display New Transaction ID (obtained by replacing ‘TR’ in TransactionID with ‘Trans’), Old Transaction ID (obtained from TransactionId), TransactionDate, StaffName, and CustomerName for every transaction which happened 2 days before 24th December 2012.
   (**replace**, **join**, **datediff**, **day**)



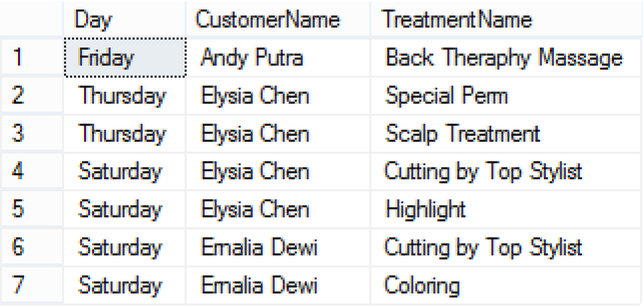
	New Transaction ID	Old Transaction ID	TransactionDate	StaffName	CustomerName
1	Trans007	TR007	2012-12-22	Dian Felita Tanoto	Emalia Dewi
2	Trans008	TR008	2012-12-22	Mellisa Pratiwi	Elysia Chen
3	Trans009	TR009	2012-12-22	Indra Saswita	Andy Putra

4. Display New Transaction Date (obtained by adding 5 days to TransactionDate), Old Transaction Date (obtained from TransactionDate), and CustomerName for every transaction which didn’t happen on day 20th.
   (**dateadd**, **day**, **join**, **datepart**)



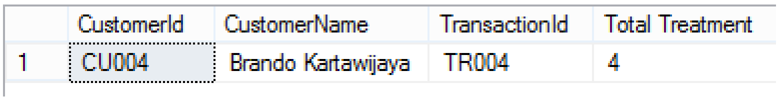
	New Transaction Date	Old Transaction Date	CustomerName
1	2012-12-26	2012-12-21	Andy Putra
2	2012-12-26	2012-12-21	Franky
3	2012-12-27	2012-12-22	Emalia Dewi
4	2012-12-27	2012-12-22	Elysia Chen
5	2012-12-27	2012-12-22	Andy Putra

5. Display Day (obtained from the day transaction happened), CustomerName, and TreatmentName for every Customer who was handled by female staff that has position name begin with ‘TOP’ word. Then order the data based on CustomerName in ascending format.
   (**datename**, **weekday**, **join**, **in**, **like**, **order by**)



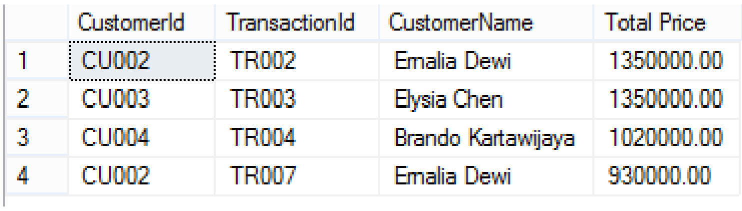
	Day	CustomerName	TreatmentName
1	Friday	Andy Putra	Back Theraphy Massage
2	Thursday	Elysia Chen	Special Perm
3	Thursday	Elysia Chen	Scalp Treatment
4	Saturday	Elysia Chen	Cutting by Top Stylist
5	Saturday	Elysia Chen	Highlight
6	Saturday	Emalia Dewi	Cutting by Top Stylist
7	Saturday	Emalia Dewi	Coloring

6. Display the first data of CustomerId, CustomerName, TransactionId, Total Treatment (obtained from the total number of treatment). Then sort the data based on Total Treatment in descending format.
(**top**, **count**, **join**, **group by**, **order by**)



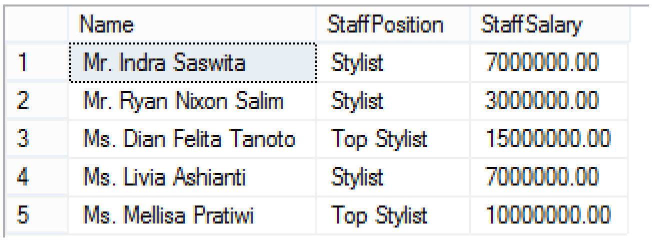
	CustomerId	CustomerName	TransactionId	Total Treatment
1	CU004	Brando Kartawijaya	TR004	4

7. Display CustomerId, TransactionId, CustomerName, and Total Price (obtained from total amount of price) for every transaction with total price is higher than the average value of treatment price from every transaction. Then sort the data based on Total Price in descending format.
(**sum**, **join**, **alias subquery**,**avg**, **group by**, **having**, **order by**)



	CustomerId	TransactionId	CustomerName	Total Price
1	CU002	TR002	Emalia Dewi	1350000.00
2	CU003	TR003	Elysia Chen	1350000.00
3	CU004	TR004	Brando Kartawijaya	1020000.00
4	CU002	TR007	Emalia Dewi	930000.00

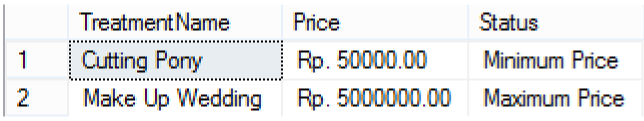
8. Display Name (obtained by adding 'Mr. ' in front of StaffName), StaffPosition, and StaffSalary for every male staff. The **combine** it with Name (obtained by adding 'Ms. ' in front of StaffName), StaffPosition, and StaffSalary for every female staff. Then sort the data based on Name and StaffPosition in ascending format.
(**union**, **order by**)



	Name	StaffPosition	StaffSalary
1	Mr. Indra Saswita	Stylist	7000000.00
2	Mr. Ryan Nixon Salim	Stylist	3000000.00
3	Ms. Dian Felita Tanoto	Top Stylist	15000000.00
4	Ms. Livia Ashianti	Stylist	7000000.00
5	Ms. Mellisa Pratiwi	Top Stylist	10000000.00

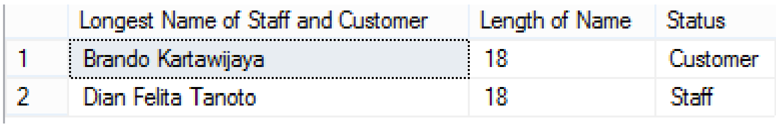
9. Display TreatmentName, Price (obtained by adding 'Rp. ' in front of Price), and Status as 'Maximum Price' for every Treatment which price is the highest treatment's price. Then **combine** it with TreatmentName, Price (obtained by adding 'Rp. ' in front of Price), and Status as 'Minimum Price' for every Treatment which price is the lowest treatment's price.
(**cast**, **max**, **alias subquery**, **union**, **min**)

```
SELECT TreatmentName, Price, 'Minimum Price' AS [Status] FROM MsTreatment,
(SELECT MIN(Price) AS a FROM MsTreatment) AS SUB
WHERE MsTreatment.Price IN SUB.a -- Min Price
```



	TreatmentName	Price	Status
1	Cutting Pony	Rp. 50000.00	Minimum Price
2	Make Up Wedding	Rp. 5000000.00	Maximum Price

10. Display Longest Name of Staff and Customer (obtained from CustomerName), Length of Name (obtained from length of customer’s name), Status as ‘Customer’ for every customer who has the longest name. Then **combine** it with Longest Name of Staff and Customer (obtained from StaffName), Length of Name (obtained from length of staff’s name), Status as ‘Staff’ for every staff who has the longest name
(**len**, **max**, **alias subquery**, **union**)



	Longest Name of Staff and Customer	Length of Name	Status
1	Brando Kartawijaya	18	Customer
2	Dian Felita Tanoto	18	Staff