


<b>Practicum Case</b>	
ISYS6169   T0206 Database Systems	
<b>Information Systems</b>	<b>E1-ISYS6123-AM01</b>
<i>Valid on Even Semester Year 2019/2020</i>	<b>Revision 00</b>

### Learning Outcomes

- Apply database language and SQL Programming language

### Topic

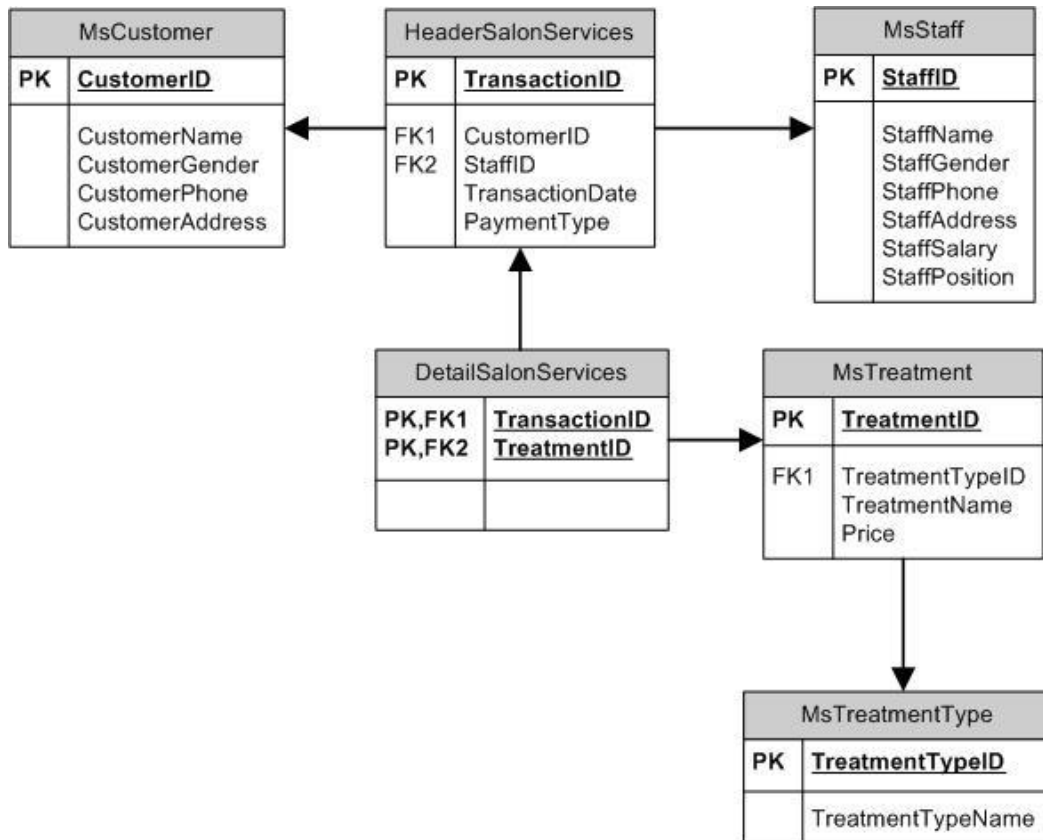
- Session 03 - SQL – Data Manipulation (1)
- Session 05 - SQL – Data Manipulation (3)

### Sub Topics

- Session 03
  - Insert Data
  - Delete Data
  - Update Data
  - Begin Trans
  - **Simple Query**
- Session 05
  - Quiz
  - String and Date Functions

## Tabel Relasional

Relational Table



**Sintaks***Syntax***Select**

```
SELECT { * | field_name [, ...] }  
FROM table_name [, ...]
```

**Distinct**

```
SELECT DISTINCT { * | field_name [, ...] }  
FROM table_name [, ...]
```

**Where**

```
SELECT { * | field_name [, ...] }  
FROM table_name [, ...]  
WHERE {condition}
```

**Between**

```
SELECT { * | field_name [, ...] }  
FROM table_name [, ...]  
WHERE field_name BETWEEN value1 AND value2
```

**Like**

```
SELECT { * | field_name [, ...] }  
FROM table_name [, ...]  
WHERE field_name LIKE {PATTERN}
```

**Soal***Case*

1. Display all female staff's data from MsStaff.

**(select)**

	StaffId	StaffName	StaffGender	StaffPhone	StaffAddress	StaffSalary	StaffPosition
1	SF001	Dian Felita Tanoto	Female	085265442222	Palmerah Street no 56	15000000.00	Top Stylist
2	SF002	Mellisa Pratiwi	Female	085755552011	Kebon Jeruk Street no 151	10000000.00	Top Stylist
3	SF003	Livia Ashianti	Female	085218542222	Kebon Jeruk Street no 19	7000000.00	Stylist

2. Display StaffName, and StaffSalary(obtained by adding 'Rp.' In front of StaffSalary) for every staff whose name contains 'm' character and has salary more than or equal to 10000000.

**(cast, like)**

	StaffName	StaffSalary
1	Mellisa Pratiwi	Rp. 10000000.00

3. Display TreatmentName, and Price for every treatment which type is 'message / spa' or 'beauty care'.

**(in)**

	TreatmentName	Price
1	Creambath	150000.00
2	Hair Spa	250000.00
3	Hair Mask	250000.00
4	Hand Spa Reflexy	200000.00
5	Reflexy	250000.00
6	Back Therapy Massage	300000.00
7	Make Up	500000.00
8	Make Up Wedding	5000000.00
9	Facial	300000.00

4. Display StaffName, StaffPosition, and TransactionDate (obtained from TransactionDate in Mon dd,yyyy format) for every staff who has salary between 7000000 and 10000000.

**(convert, between)**

	StaffName	StaffPosition	TransactionDate
1	Indra Saswita	Stylist	Dec 20, 2012
2	Livia Ashianti	Stylist	Dec 20, 2012
3	Livia Ashianti	Stylist	Dec 21, 2012
4	Mellisa Pratiwi	Top Stylist	Dec 22, 2012
5	Indra Saswita	Stylist	Dec 22, 2012

5. Display Name (obtained by taking the first character of customer's name until character before space), Gender (obtained from first character of customer's gender), and PaymentType for every transaction that is paid by 'Debit'.

(**substring, charindex, left**)

	Name	Gender	PaymentType
1	Brando	M	Debit
2	Andy	M	Debit
3	Andy	M	Debit

6. Display Initial (obtained from first character of customer's name and followed by first character of customer's last name in uppercase format), and Day (obtained from the day when transaction happened ) for every transaction which the day difference with 24<sup>th</sup> December 2012 is less than 3 days.

(**upper, left, substring, charindex, datetime, weekday, datediff, day**)

	Initial	Day
1	ED	Saturday
2	EC	Saturday
3	AP	Saturday

7. Display TransactionDate, and CustomerName (obtained by taking the character after space until the last character in CustomerName) for every customer whose name contains space and did the transaction on Saturday.

(**right, charindex, reverse, like, datetime, weekday**)

	TransactionDate	CustomerName
1	2012-12-22	Dewi
2	2012-12-22	Chen
3	2012-12-22	Putra

8. Display StaffName, CustomerName, CustomerPhone (obtained from customer's phone by replacing '0' with '+62'), and CustomerAddress for every customer whose name contains vowel character and handled by staff whose name contains at least 3 words.

(**replace, like**)

	StaffName	CustomerName	CustomerPhone	CustomerAddress
1	Ryan Nixon Salim	Emalia Dewi	+6285264782135	Tanjung Duren Street no 185
2	Dian Felita Tanoto	Emalia Dewi	+6285264782135	Tanjung Duren Street no 185

9. Display StaffName, TreatmentName, and Term of Transaction (obtained from the day difference between transactionDate and 24<sup>th</sup> December 2012) for every treatment which name is more than 20 characters or contains more than one word.

(**datediff, day, len, like**)

	StaffName	TreatmentName	Term of Transaction
1	Indra Saswita	Cutting by Stylist	4
2	Ryan Nixon Salim	Rebonding Treatment	4
3	Livia Ashianti	Special Perm	4
4	Livia Ashianti	Scalp Treatment	4
5	Ryan Nixon Salim	Cutting by Stylist	4
6	Ryan Nixon Salim	Back Theraphy Massage	4
7	Livia Ashianti	Back Theraphy Massage	3
8	Dian Felita Tanoto	Cutting by Top Stylist	2
9	Mellisa Pratiwi	Cutting by Top Stylist	2

10. Display TransactionDate, CustomerName, TreatmentName, Discount (obtainedby changing Price data type into int and multiply it by 20%), and PaymentType for every transaction which happened on 22<sup>th</sup> day.  
(cast, day)

	TransactionDate	CustomerName	TreatmentName	Discount	Payment Type
1	2012-12-22	Emalia Dewi	Cutting by Top Stylist	90000	Cash
2	2012-12-22	Emalia Dewi	Coloring	96000	Cash
3	2012-12-22	Elysia Chen	Cutting by Top Stylist	90000	Credit
4	2012-12-22	Elysia Chen	Highlight	64000	Credit
5	2012-12-22	Andy Putra	Coloring	96000	Debit
6	2012-12-22	Andy Putra	Highlight	64000	Debit