

JOBSHEET

PRAKTIKUM BASIS DATA LANJUT

Jurusan Teknologi Informasi
POLITEKNIK NEGERI MALANG



PERTEMUAN 3

SQL SERVER – TIPE DATA, FUNGSI BAWAAN, & TABLE EXPRESSION



Jurusan Teknologi Informasi Politeknik Negeri Malang

Jobsheet-3: Tipe Data dan Fungsi pada Tipe Data

Mata Kuliah Basis Data Lanjut

Pengampu: Tim Ajar Basis Data Lanjut

September 2023

Topik

1. Tipe Data
2. Fungsi pada Tipe Data

Tujuan

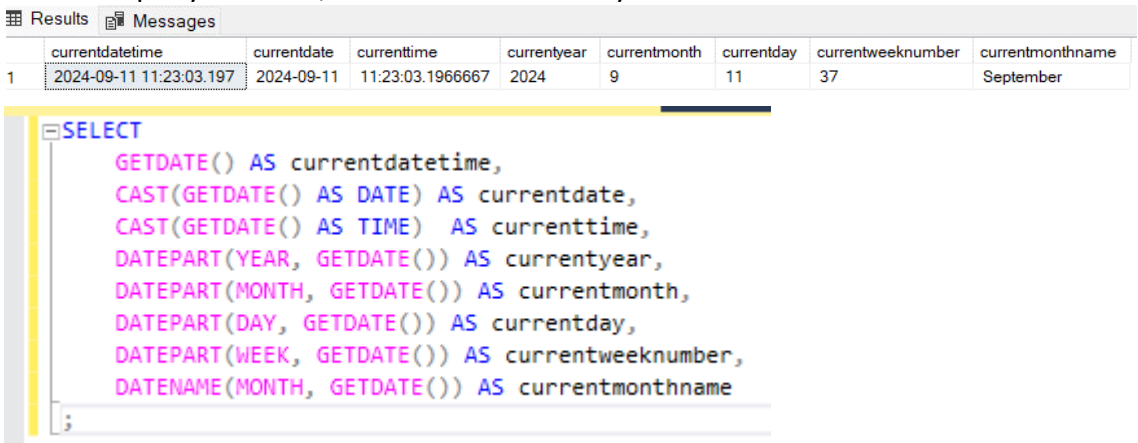
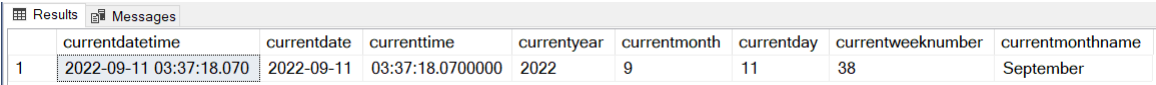
Mahasiswa diharapkan dapat:

1. Memahami cara melakukan query date & time
2. Memahami cara menggunakan fungsi-fungsi date & time
3. Memahami cara menggabungkan data karakter
4. Memahami cara menggunakan fungsi-fungsi karakter

Petunjuk Umum

1. Ikuti langkah-langkah pada bagian-bagian praktikum sesuai dengan urutan yang diberikan.
2. Jawablah semua pertanyaan bertanda **[Soal-X]** yang terdapat pada langkah-langkah tertentu di setiap bagian praktikum.
3. Dalam setiap langkah pada praktikum terdapat penjelasan yang akan membantu Anda dalam menjawab pertanyaan-pertanyaan pada petunjuk nomor 2, maka baca dan kerjakanlah semua bagian praktikum dalam jobsheet ini.
4. Tulis jawaban dari soal-soal pada petunjuk nomor 3 pada sebuah laporan yang dikerjakan menggunakan aplikasi word processing (Word, OpenOffice, atau yang lain yang sejenis). Ekspor sebagai file **PDF** dengan format nama sebagai berikut:
 - **BDL_Kelas_03_NamaLengkapAnda.pdf**
 - o **Contoh:** BDL_TI2Z_03_Bang Mudrik.pdf
 - Kumpulkan file PDF tersebut sebagai laporan praktikum kepada dosen pengampu.
 - Selain pada nama file, cantumkan juga identitas Anda pada halaman pertama laporan tersebut.

Praktikum – Bagian 1: Menulis query SELECT untuk mendapatkan tanggal dan waktu saat ini

| Langkah | Keterangan |
|---------|---|
| 1 | <p>[Soal-1] Tulislah sebuah query SELECT untuk menampilkan kolom-kolom yang berisi:</p> <ol style="list-style-type: none"> Tanggal dan waktu saat ini, beri nama alias <i>currentdatetime</i> Hanya tanggal saat ini, beri nama alias <i>currentdate</i> Hanya waktu (HH:mm:ss) saat ini saja, beri nama alias <i>currenttime</i> Hanya tahun ini saja, beri nama alias <i>currentyear</i> Hanya bilangan bulan (angka) ini saja, beri nama alias <i>currentmonth</i> Hanya bilangan hari pada bulan ini saja, beri nama alias <i>currentday</i> Hanya bilangan minggu ke-<i>n</i> dalam tahun ini, beri nama alias <i>currentweeknumber</i> Nama bulan saat ini, berikan nama alias <i>currentmonthname</i> <p>Eksekusi query tersebut, dan <i>screenshot</i> hasilnya.</p>  |
| 3 | <p>Bandingkan hasil eksekusi query pada langkah 2 di atas dengan hasil yang ada pada gambar berikut:</p>  <p>Nilai yang didapatkan tentu akan berbeda karena bergantung pada saat kapan query tersebut dieksekusi.</p> |
| 4 | <p>[Soal-2] Dapatkah alias <i>currentdatetime</i> digunakan pada [Soal-1-b] untuk menggantikan alias <i>currentdate</i>? Jelaskan!</p> <p>Bisa, karena perintah alias hanya akan mengubah nama alias saja bukan mengganti hasil</p> |

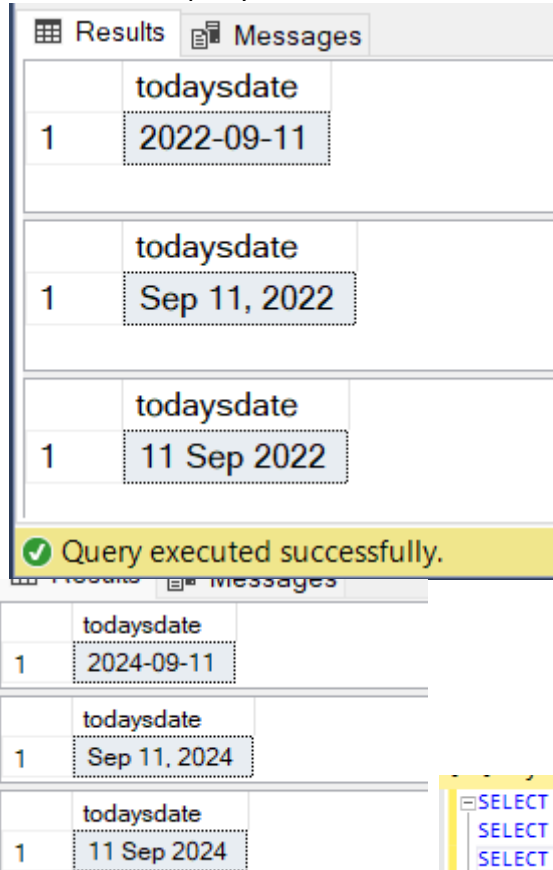
Praktikum – Bagian 2: Menulis query SELECT untuk mendapatkan tipe data *date*

| Langkah | Keterangan |
|---------|------------|
|---------|------------|

1

[Soal-3] Tulislah sebuah query SELECT dengan menggunakan beberapa fungsi pada T-SQL yang berbeda (CAST, CONVERT, fungsi spesifik lain, dll) untuk menampilkan tanggal hari ini. Beri nama *today'sdate* sebagai alias nama kolomnya.

Contoh hasil query:



The screenshot shows three separate query results windows. Each window has a tab labeled 'Results' and a message tab. The first window shows the date '2022-09-11'. The second window shows the date 'Sep 11, 2022'. The third window shows the date '11 Sep 2022'. A yellow banner at the bottom of the third window says 'Query executed successfully.' Below this, the SQL query is shown: `SELECT CAST(GETDATE() AS DATE) AS today'sdate;`

Praktikum – Bagian 3: Menulis query SELECT yang menggunakan beberapa fungsi *date* dan *time*

| Langkah | Keterangan |
|---------|---|
| 1 | <p>[Soal-4] Tulislah sebuah query SELECT yang menghasilkan beberapa kolom yang berisi:</p> <ol style="list-style-type: none"> Tanggal dan waktu 5 bulan ke depan dari saat ini. Beri nama alias <i>fivemonths</i>. Banyaknya hari antara tanggal saat ini dan kolom pertama (<i>fivemonths</i> pada point a di atas). Beri nama alias <i>diffdays</i>. Banyaknya minggu antara 17 Agustus 1945 dan 17 Agustus 2022. Gunakan alias <i>diffweeks</i>. Hari pertama pada bulan ini berdasarkan tanggal dan waktu saat ini. Gunakan alias <i>firstday</i>. |



2

Eksekusi query di atas, dan *screenshot* hasilnya. Bandingkan hasil yang didapatkan dengan hasil berikut ini:

| Results Messages | | | | |
|------------------|-------------------------|----------|-----------|-------------------------|
| | fivemonths | diffdays | diffweeks | firstday |
| 1 | 2023-02-11 03:47:14.853 | 91 | 4018 | 2022-09-01 00:00:00.000 |

| Results Messages | | | | |
|------------------|-------------------------|----------|-----------|-------------------------|
| | fivemonths | diffdays | diffweeks | firstday |
| 1 | 2025-02-12 20:03:54.960 | 153 | 4018 | 2024-09-01 00:00:00.000 |

Cukup berbeda dalam jumlah hari karena pada contoh hanya jumlah hari sampai 3 bulan kedepan sedangkan yang diperintahkan adalah jumlah hari dari 5 bulan kedepan

Praktikum – Bagian 4: Observasi pada tabel Sales.Somedates

| Langkah | Keterangan |
|---------|---|
| 1 | <p>Tuliskan query T-SQL meng-create sebuah tabel bernama <i>Sales.Somedates</i> beserta isinya berikut ini, kemudian eksekusilah.</p> <pre>CREATE TABLE Sales.Somedates (isitdate varchar(9)); INSERT INTO Sales.Somedates (isitdate) VALUES ('20230101'), ('20230102'), ('20230103X'), ('20230104'), ('20230105'), ('20230106'), ('20230107Y'), ('20230108');</pre> |
| 2 | <p>[Soal-5] Tuliskan sebuah query T-SQL untuk mendapatkan kolom bernama <i>isitdate</i> pada tabel <i>Sales.Somedates</i>. Lalu buatlah sebuah kolom baru bernama <i>converteddate</i> bertipe data <i>date</i> berdasarkan kolom <i>isitdate</i>. Jika data pada kolom <i>isitdate</i> tidak dapat dikonversi ke tipe data <i>date</i>, <i>return</i> sebagai NULL.</p> |

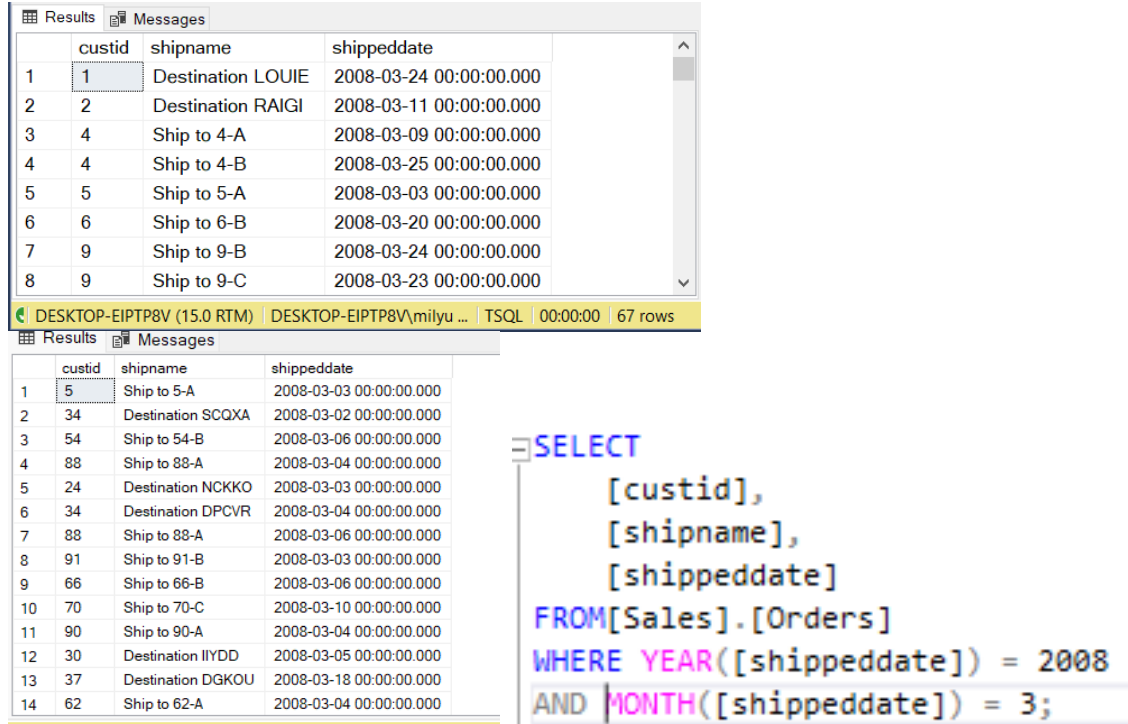
| | <div><div>ResultsMessages</div><table><thead><tr><th></th><th>isitdate</th><th>coverteddate</th></tr></thead><tbody><tr><td>1</td><td>20230101</td><td>2023-01-01</td></tr><tr><td>2</td><td>20230102</td><td>2023-01-02</td></tr><tr><td>3</td><td>20230103X</td><td>NULL</td></tr><tr><td>4</td><td>20230104</td><td>2023-01-04</td></tr><tr><td>5</td><td>20230105</td><td>2023-01-05</td></tr><tr><td>6</td><td>20230106</td><td>2023-01-06</td></tr><tr><td>7</td><td>20230107Y</td><td>NULL</td></tr><tr><td>8</td><td>20230108</td><td>2023-01-08</td></tr><tr><td>9</td><td>20230101</td><td>2023-01-01</td></tr><tr><td>10</td><td>20230102</td><td>2023-01-02</td></tr><tr><td>11</td><td>20230103X</td><td>NULL</td></tr><tr><td>12</td><td>20230104</td><td>2023-01-04</td></tr><tr><td>13</td><td>20230105</td><td>2023-01-05</td></tr><tr><td>14</td><td>20230106</td><td>2023-01-06</td></tr></tbody></table><div><div>SELECT</div><div>[isitdate], CASE WHEN ISDATE([isitdate]) = 1 THEN CAST([isitdate] AS DATE) ELSE NULL END AS coverteddate FROM [Sales].[Somedates];</div></div></div> | | isitdate | coverteddate | 1 | 20230101 | 2023-01-01 | 2 | 20230102 | 2023-01-02 | 3 | 20230103X | NULL | 4 | 20230104 | 2023-01-04 | 5 | 20230105 | 2023-01-05 | 6 | 20230106 | 2023-01-06 | 7 | 20230107Y | NULL | 8 | 20230108 | 2023-01-08 | 9 | 20230101 | 2023-01-01 | 10 | 20230102 | 2023-01-02 | 11 | 20230103X | NULL | 12 | 20230104 | 2023-01-04 | 13 | 20230105 | 2023-01-05 | 14 | 20230106 | 2023-01-06 |
|----|---|-------------------------|--------------|--------------------|---|-----------------------------|-------------------------|---|----------|------------|---|-----------|------|---|----------|------------|---|----------|------------|---|----------|------------|---|-----------|------|---|----------|------------|---|----------|------------|----|----------|------------|----|-----------|------|----|----------|------------|----|----------|------------|----|----------|------------|
| | isitdate | coverteddate | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 20230101 | 2023-01-01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 20230102 | 2023-01-02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 20230103X | NULL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 20230104 | 2023-01-04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 20230105 | 2023-01-05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 20230106 | 2023-01-06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 20230107Y | NULL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 20230108 | 2023-01-08 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 20230101 | 2023-01-01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 20230102 | 2023-01-02 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 20230103X | NULL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 20230104 | 2023-01-04 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | 20230105 | 2023-01-05 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 20230106 | 2023-01-06 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Eksekusi langkah ke-2 di atas, dan <i>screenshot</i> hasilnya. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | <p>[Soal-6] Apakah perbedaan antara fungsi SYSDATETIME dan CURRENT_TIMESTAMP? Tunjukkan perbedaan hasil kedua fungsi tersebut</p> <table><thead><tr><th></th><th>sysdatetimes</th><th>current_timestamps</th></tr></thead><tbody><tr><td>1</td><td>2024-09-15 12:47:36.5156745</td><td>2024-09-15 12:47:36.513</td></tr></tbody></table> <p>SYSDATETIME(): Menghasilkan waktu server dengan presisi lebih tinggi (7 digit desimal) dalam format datetime2.</p> <p>CURRENT_TIMESTAMP: Menghasilkan waktu server dengan presisi lebih rendah (3 digit desimal) dalam format datetime.</p> | | sysdatetimes | current_timestamps | 1 | 2024-09-15 12:47:36.5156745 | 2024-09-15 12:47:36.513 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | sysdatetimes | current_timestamps | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 2024-09-15 12:47:36.5156745 | 2024-09-15 12:47:36.513 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | <p>[Soal-7] Apakah format umum dari tipe DATE?</p> <p>YYYY-MM-DD</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | <p>Kesimpulan: Setelah ujicoba bagian ini, mahasiswa dapat mengetahui bagaimana cara menampilkan tanggal dan waktu dengan T-SQL</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Praktikum – Bagian 5: Menulis Query yang menggunakan fungsi *date* dan *time*

| Langkah | Keterangan |
|---------|--|
| 1 | <p>Skenario: Bagian Sales menginginkan laporan penjualan dalam jangka waktu yang berbeda-beda. Staf Sales ingin menganalisa data penjualan berdasar customer, berdasar produk, dan order yang dibuat di akhir bulan. Untuk dapat membuat laporan tersebut, Anda sebagai DB Admin harus menulis query SELECT dengan menggunakan berbagai fungsi <i>date</i> dan <i>time</i>.</p> |
| 2 | <p>[Soal-8] Tuliskan query SELECT untuk mendapatkan data unik pada kolom <i>custid</i>, <i>shipname</i>, <i>shipdate</i> dalam tabel <i>Sales.Orders</i>. Filter hasil tersebut agar hanya menampilkan order pada bulan Maret 2008 saja.</p> |

3

Eksekusi langkah ke-2 di atas, dan *screenshot* hasilnya. Bandingkan dengan hasil pada gambar berikut ini:



The screenshot displays two windows in SQL Server Enterprise Manager. The top window shows the results of a query, listing columns: custid, shipname, and shippeddate. It contains 8 rows of data. The bottom window shows the SQL query used to retrieve this data, which filters orders from the year 2008 and month 3.

| | custid | shipname | shippeddate |
|---|--------|-------------------|-------------------------|
| 1 | 1 | Destination LOUIE | 2008-03-24 00:00:00.000 |
| 2 | 2 | Destination RAIGI | 2008-03-11 00:00:00.000 |
| 3 | 4 | Ship to 4-A | 2008-03-09 00:00:00.000 |
| 4 | 4 | Ship to 4-B | 2008-03-25 00:00:00.000 |
| 5 | 5 | Ship to 5-A | 2008-03-03 00:00:00.000 |
| 6 | 6 | Ship to 6-B | 2008-03-20 00:00:00.000 |
| 7 | 9 | Ship to 9-B | 2008-03-24 00:00:00.000 |
| 8 | 9 | Ship to 9-C | 2008-03-23 00:00:00.000 |


| | custid | shipname | shippeddate |
|----|--------|-------------------|-------------------------|
| 1 | 5 | Ship to 5-A | 2008-03-03 00:00:00.000 |
| 2 | 34 | Destination SCQXA | 2008-03-02 00:00:00.000 |
| 3 | 54 | Ship to 54-B | 2008-03-06 00:00:00.000 |
| 4 | 88 | Ship to 88-A | 2008-03-04 00:00:00.000 |
| 5 | 24 | Destination NCKKO | 2008-03-03 00:00:00.000 |
| 6 | 34 | Destination DPCVR | 2008-03-04 00:00:00.000 |
| 7 | 88 | Ship to 88-A | 2008-03-06 00:00:00.000 |
| 8 | 91 | Ship to 91-B | 2008-03-03 00:00:00.000 |
| 9 | 66 | Ship to 66-B | 2008-03-06 00:00:00.000 |
| 10 | 70 | Ship to 70-C | 2008-03-10 00:00:00.000 |
| 11 | 90 | Ship to 90-A | 2008-03-04 00:00:00.000 |
| 12 | 30 | Destination ILYDD | 2008-03-05 00:00:00.000 |
| 13 | 37 | Destination DGKOU | 2008-03-18 00:00:00.000 |
| 14 | 62 | Ship to 62-A | 2008-03-04 00:00:00.000 |

```

SELECT
    [custid],
    [shipname],
    [shippeddate]
FROM [Sales].[Orders]
WHERE YEAR([shippeddate]) = 2008
AND MONTH([shippeddate]) = 3;

```

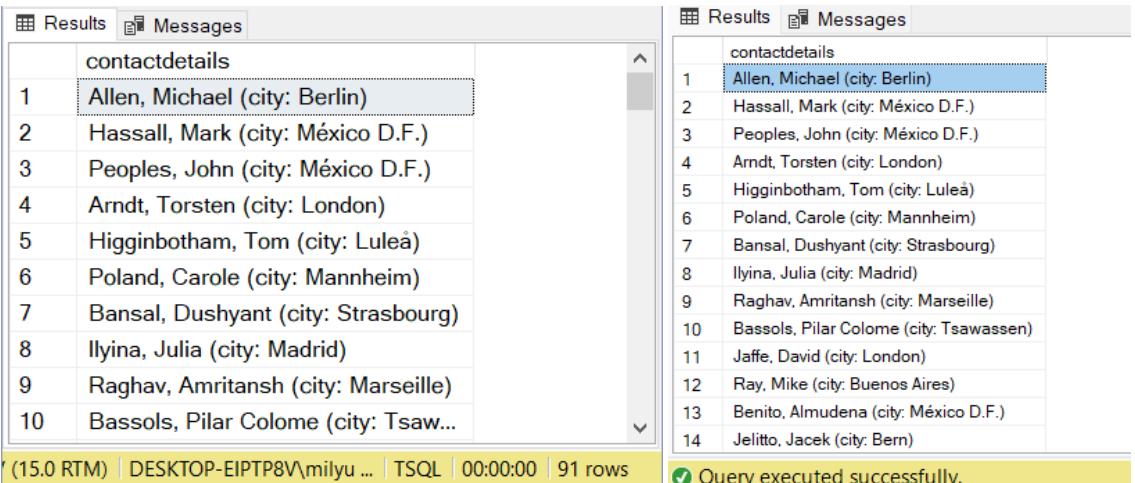
Praktikum – Bagian 6: Menuliskan Query SELECT untuk menghitung hari pertama dan terakhir dalam 1 bulan

| Langkah | Keterangan |
|---------|---|
| 1 | <p>[Soal-9] Tulislah sebuah query SELECT dengan menampilkan 3 kolom berikut:</p> <ol style="list-style-type: none"> Tanggal dan waktu saat anda mengerjakan jobsheet ini Tanggal paling awal bulan saat anda mengerjakan jobsheet ini Tanggal terakhir bulan saat anda mengerjakan jobsheet ini <pre> SELECT GETDATE() AS currentdatetime, CAST(DATETIMEFROMPARTS(YEAR(GETDATE()),MONTH(GETDATE()),1) AS DATE) AS firstday, CAST(DATETIMEFROMPARTS(YEAR(GETDATE()),MONTH(GETDATE()),30) AS DATE) AS lastday ; </pre> |
| 2 | <p>[Soal-10] Eksekusi langkah ke-1 di atas dan <i>screenshot</i> hasilnya. Apa yang dapat anda simpulkan dari percobaan ini?</p>  <p>Dapat menampilkan waktu saat ini dan tanggal awal maupun akhir pada bulan saat ini</p> |

Praktikum – Bagian 7: Menulis query SELECT untuk menghasilkan data order dalam 5 hari terakhir dalam 1 bulan

| Langkah | Keterangan | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|--------|-------------------------|--------------------------------|-----------|-------------|---|-------|----|-------------------------|---------------------|---|-------|----|-------------------------|--------------------------------|---|-------|----|-------------------------|---------------------|---|-------|----|-------------------------|------------------------|---|-------|----|-------------------------|---------------------------|---|-------|----|-------------------------|--------------------------|---|-------|----|-------------------------|-------------------|---|-------|----|-------------------------|-----------------|---|-------|----|-------------------------|--------------------------------|--|---------|--------|-----------|-------------|---|-------|----|-------------------------|---------------------|---|-------|----|-------------------------|--------------------------------|---|-------|----|-------------------------|---------------------|---|-------|----|-------------------------|------------------------|---|-------|----|-------------------------|---------------------------|---|-------|----|-------------------------|--------------------------|---|-------|----|-------------------------|-------------------|---|-------|----|-------------------------|-----------------|---|-------|----|-------------------------|--------------------------------|----|-------|----|-------------------------|-----------------|----|-------|----|-------------------------|----------------------|----|-------|----|-------------------------|----------------------|----|-------|---|-------------------------|------------------------|----|-------|----|-------------------------|----------------|
| 1 | <p>[Soal-11] Tulislah query SELECT untuk menampilkan kolom <i>orderid</i>, <i>custid</i>, <i>orderdate</i>, dan <i>shipaddress</i> dari tabel <i>Sales.Orders</i>. Filter hasil tersebut agar hanya menampilkan order pada 5 hari terakhir dalam 1 bulan order.</p> <pre>SELECT [orderid], [custid], [orderdate], [shipaddress] FROM [Sales].[Orders] WHERE DAY([orderdate]) > (DAY(EOMONTH([orderdate])) - 5);</pre> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | <p>Eksekusi langkah ke-1 di atas dan screenshot hasilnya. Bandingkan dengan hasil pada gambar berikut ini:</p> <div><div>ResultsMessages</div><table><tr><th></th><th>orderid</th><th>custid</th><th>orderdate</th><th>shipaddress</th></tr><tr><td>1</td><td>10267</td><td>25</td><td>2006-07-29 00:00:00.000</td><td>Berliner Platz 0123</td></tr><tr><td>2</td><td>10268</td><td>33</td><td>2006-07-30 00:00:00.000</td><td>5ª Ave. Los Palos Grandes 5678</td></tr><tr><td>3</td><td>10269</td><td>89</td><td>2006-07-31 00:00:00.000</td><td>8901 - 12th Ave. S.</td></tr><tr><td>4</td><td>10290</td><td>15</td><td>2006-08-27 00:00:00.000</td><td>Av. dos Lusiadas, 4567</td></tr><tr><td>5</td><td>10291</td><td>61</td><td>2006-08-27 00:00:00.000</td><td>Rua da Panificadora, 5678</td></tr><tr><td>6</td><td>10292</td><td>81</td><td>2006-08-28 00:00:00.000</td><td>Av. Inês de Castro, 6789</td></tr><tr><td>7</td><td>10293</td><td>80</td><td>2006-08-29 00:00:00.000</td><td>Avda. Azteca 4567</td></tr><tr><td>8</td><td>10294</td><td>65</td><td>2006-08-30 00:00:00.000</td><td>7890 Milton Dr.</td></tr><tr><td>9</td><td>10315</td><td>38</td><td>2006-09-26 00:00:00.000</td><td>Garden House Crowther Way 9012</td></tr></table><div>Query exec...DESKTOP-EIPT8V (15.0 RTM) DESKTOP-EIPT8V\milyu... TSQL 00:00:00 140 rows</div><div>ResultsMessages</div><table><tr><th></th><th>orderid</th><th>custid</th><th>orderdate</th><th>shipaddress</th></tr><tr><td>1</td><td>10267</td><td>25</td><td>2006-07-29 00:00:00.000</td><td>Berliner Platz 0123</td></tr><tr><td>2</td><td>10268</td><td>33</td><td>2006-07-30 00:00:00.000</td><td>5ª Ave. Los Palos Grandes 5678</td></tr><tr><td>3</td><td>10269</td><td>89</td><td>2006-07-31 00:00:00.000</td><td>8901 - 12th Ave. S.</td></tr><tr><td>4</td><td>10290</td><td>15</td><td>2006-08-27 00:00:00.000</td><td>Av. dos Lusiadas, 4567</td></tr><tr><td>5</td><td>10291</td><td>61</td><td>2006-08-27 00:00:00.000</td><td>Rua da Panificadora, 5678</td></tr><tr><td>6</td><td>10292</td><td>81</td><td>2006-08-28 00:00:00.000</td><td>Av. Inês de Castro, 6789</td></tr><tr><td>7</td><td>10293</td><td>80</td><td>2006-08-29 00:00:00.000</td><td>Avda. Azteca 4567</td></tr><tr><td>8</td><td>10294</td><td>65</td><td>2006-08-30 00:00:00.000</td><td>7890 Milton Dr.</td></tr><tr><td>9</td><td>10315</td><td>38</td><td>2006-09-26 00:00:00.000</td><td>Garden House Crowther Way 9012</td></tr><tr><td>10</td><td>10316</td><td>65</td><td>2006-09-27 00:00:00.000</td><td>8901 Milton Dr.</td></tr><tr><td>11</td><td>10317</td><td>48</td><td>2006-09-30 00:00:00.000</td><td>6789 Chiaroscuro Rd.</td></tr><tr><td>12</td><td>10339</td><td>51</td><td>2006-10-28 00:00:00.000</td><td>8901 rue St. Laurent</td></tr><tr><td>13</td><td>10340</td><td>9</td><td>2006-10-29 00:00:00.000</td><td>8901, rue des Bouchers</td></tr><tr><td>14</td><td>10341</td><td>73</td><td>2006-10-29 00:00:00.000</td><td>Vinbæltet 1234</td></tr></table><div>Query executed successfully.</div></div> | | orderid | custid | orderdate | shipaddress | 1 | 10267 | 25 | 2006-07-29 00:00:00.000 | Berliner Platz 0123 | 2 | 10268 | 33 | 2006-07-30 00:00:00.000 | 5ª Ave. Los Palos Grandes 5678 | 3 | 10269 | 89 | 2006-07-31 00:00:00.000 | 8901 - 12th Ave. S. | 4 | 10290 | 15 | 2006-08-27 00:00:00.000 | Av. dos Lusiadas, 4567 | 5 | 10291 | 61 | 2006-08-27 00:00:00.000 | Rua da Panificadora, 5678 | 6 | 10292 | 81 | 2006-08-28 00:00:00.000 | Av. Inês de Castro, 6789 | 7 | 10293 | 80 | 2006-08-29 00:00:00.000 | Avda. Azteca 4567 | 8 | 10294 | 65 | 2006-08-30 00:00:00.000 | 7890 Milton Dr. | 9 | 10315 | 38 | 2006-09-26 00:00:00.000 | Garden House Crowther Way 9012 | | orderid | custid | orderdate | shipaddress | 1 | 10267 | 25 | 2006-07-29 00:00:00.000 | Berliner Platz 0123 | 2 | 10268 | 33 | 2006-07-30 00:00:00.000 | 5ª Ave. Los Palos Grandes 5678 | 3 | 10269 | 89 | 2006-07-31 00:00:00.000 | 8901 - 12th Ave. S. | 4 | 10290 | 15 | 2006-08-27 00:00:00.000 | Av. dos Lusiadas, 4567 | 5 | 10291 | 61 | 2006-08-27 00:00:00.000 | Rua da Panificadora, 5678 | 6 | 10292 | 81 | 2006-08-28 00:00:00.000 | Av. Inês de Castro, 6789 | 7 | 10293 | 80 | 2006-08-29 00:00:00.000 | Avda. Azteca 4567 | 8 | 10294 | 65 | 2006-08-30 00:00:00.000 | 7890 Milton Dr. | 9 | 10315 | 38 | 2006-09-26 00:00:00.000 | Garden House Crowther Way 9012 | 10 | 10316 | 65 | 2006-09-27 00:00:00.000 | 8901 Milton Dr. | 11 | 10317 | 48 | 2006-09-30 00:00:00.000 | 6789 Chiaroscuro Rd. | 12 | 10339 | 51 | 2006-10-28 00:00:00.000 | 8901 rue St. Laurent | 13 | 10340 | 9 | 2006-10-29 00:00:00.000 | 8901, rue des Bouchers | 14 | 10341 | 73 | 2006-10-29 00:00:00.000 | Vinbæltet 1234 |
| | orderid | custid | orderdate | shipaddress | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 10267 | 25 | 2006-07-29 00:00:00.000 | Berliner Platz 0123 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 10268 | 33 | 2006-07-30 00:00:00.000 | 5ª Ave. Los Palos Grandes 5678 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 10269 | 89 | 2006-07-31 00:00:00.000 | 8901 - 12th Ave. S. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 10290 | 15 | 2006-08-27 00:00:00.000 | Av. dos Lusiadas, 4567 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 10291 | 61 | 2006-08-27 00:00:00.000 | Rua da Panificadora, 5678 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 10292 | 81 | 2006-08-28 00:00:00.000 | Av. Inês de Castro, 6789 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 10293 | 80 | 2006-08-29 00:00:00.000 | Avda. Azteca 4567 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 10294 | 65 | 2006-08-30 00:00:00.000 | 7890 Milton Dr. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 10315 | 38 | 2006-09-26 00:00:00.000 | Garden House Crowther Way 9012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | orderid | custid | orderdate | shipaddress | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 10267 | 25 | 2006-07-29 00:00:00.000 | Berliner Platz 0123 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | 10268 | 33 | 2006-07-30 00:00:00.000 | 5ª Ave. Los Palos Grandes 5678 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | 10269 | 89 | 2006-07-31 00:00:00.000 | 8901 - 12th Ave. S. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | 10290 | 15 | 2006-08-27 00:00:00.000 | Av. dos Lusiadas, 4567 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | 10291 | 61 | 2006-08-27 00:00:00.000 | Rua da Panificadora, 5678 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | 10292 | 81 | 2006-08-28 00:00:00.000 | Av. Inês de Castro, 6789 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | 10293 | 80 | 2006-08-29 00:00:00.000 | Avda. Azteca 4567 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | 10294 | 65 | 2006-08-30 00:00:00.000 | 7890 Milton Dr. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | 10315 | 38 | 2006-09-26 00:00:00.000 | Garden House Crowther Way 9012 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | 10316 | 65 | 2006-09-27 00:00:00.000 | 8901 Milton Dr. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | 10317 | 48 | 2006-09-30 00:00:00.000 | 6789 Chiaroscuro Rd. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | 10339 | 51 | 2006-10-28 00:00:00.000 | 8901 rue St. Laurent | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | 10340 | 9 | 2006-10-29 00:00:00.000 | 8901, rue des Bouchers | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | 10341 | 73 | 2006-10-29 00:00:00.000 | Vinbæltet 1234 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | <p>Kesimpulan: Setelah ujicoba ini, mahasiswa dapat mengetahui bagaimana menggunakan berbagai fungsi date dan time pada T-SQL</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Praktikum – Bagian 8: Menulis query SELECT untuk menggabungkan 2 kolom

| Langkah | Keterangan |
|---------|--|
| 1 | Skenario: Staf Marketing membutuhkan laporan yang lebih ringkas ketika akan ditunjukkan kepada customer, dengan menggabungkan 2 kolom data menjadi 1. |
| 2 | <p>[Soal-12] Tulislah sebuah query SELECT terhadap tabel <i>Sales.Customers</i> dan dapatkan kolom <i>contactname</i> dan <i>city</i>. Gabungkan kedua kolom tersebut sehingga tampilannya seperti:</p> <p>Allen, Michael (city:Berlin,)</p> <pre> SELECT [contactname] + ' (city: ' + [city] + ')' AS contactdetails FROM [Sales].[Customers]; </pre> |
| 3 | <p>Eksekusi query pada langkah 1 dan screenshot hasilnya. Bandingkan dengan hasil yang ditunjukkan pada gambar berikut ini:</p>  <p>The screenshot displays two side-by-side windows showing the results of the SQL query. Both windows show a table with one column named 'contactdetails' and 10 rows of data. The data is concatenated text: 'Name (city: CityName)'. The first row is 'Allen, Michael (city: Berlin)'. The status bar at the bottom indicates 'Query executed successfully.' and '91 rows'.</p> |

Praktikum – Bagian 9: Menulis query SELECT untuk menampilkan semua customer berdasarkan karakter pertama dalam nama kontak

| Langkah | Keterangan |
|---------|--|
| 1 | <p>[Soal-13] Tulislah sebuah query SELECT untuk menampilkan kolom <i>contactname</i> dan <i>contacttitle</i> dari tabel <i>Sales.Customers</i>. Filter agar hanya menampilkan nama kontak yang karakter pertamanya adalah 'A' hingga 'G' saja.</p> <pre> SELECT [contactname], [contacttitle] FROM [Sales].[Customers] WHERE [contactname] LIKE '[A-G]%' ; </pre> |



2

Eksekusi query pada langkah 1 di atas dan screenshot hasilnya. Bandingkan dengan hasil yang ditunjukkan gambar berikut ini:

| Results | | Messages |
|---------|--------------------------------|----------------------|
| | contactname | contacttitle |
| 1 | Allen, Michael | Sales Representative |
| 2 | Arndt, Torsten | Sales Representative |
| 3 | Bansal, Dushyant | Marketing Manager |
| 4 | Bassols, Pilar Colome | Accounting Manager |
| 5 | Benito, Almudena | Marketing Manager |
| 6 | Birkby, Dana | Sales Representative |
| 7 | Boseman, Randall | Sales Agent |
| 8 | Bueno, Janaina Burdan, Neville | Accounting Manager |
| 9 | Carlson, Jason | Marketing Manager |
| 10 | Cavaglieri, Giorgio | Sales Manager |

EIPTP8V (15.0 RTM) | DESKTOP-EIPTP8V\milyu ... | TSQL | 00:00:00 | 29 rows

| Results | | Messages |
|---------|--------------------------------|----------------------|
| | contactname | contacttitle |
| 1 | Allen, Michael | Sales Representative |
| 2 | Arndt, Torsten | Sales Representative |
| 3 | Bansal, Dushyant | Marketing Manager |
| 4 | Bassols, Pilar Colome | Accounting Manager |
| 5 | Benito, Almudena | Marketing Manager |
| 6 | Birkby, Dana | Sales Representative |
| 7 | Boseman, Randall | Sales Agent |
| 8 | Bueno, Janaina Burdan, Neville | Accounting Manager |
| 9 | Carlson, Jason | Marketing Manager |
| 10 | Cavaglieri, Giorgio | Sales Manager |
| 11 | Cheng, Yao-Qiang | Sales Associate |
| 12 | Cohen, Shy | Accounting Manager |
| 13 | Cr?ciun, Ovidiu V. | Sales Associate |
| 14 | De Oliveira, Jose | Sales Representative |

Query executed successfully.

3

Kesimpulan: Setelah uji coba ini, mahasiswa seharusnya dapat memahami dan mengetahui bagaimana cara menggabungkan character data

Praktikum – Bagian 10: Menulis query SELECT yang menggunakan fungsi SUBSTRING

| Langkah | Keterangan |
|---------|--|
| 1 | <p>[Soal-14] Tulislah sebuah query SELECT untuk menampilkan kolom <i>contactname</i> dari tabel <i>Sales.Customers</i> dan <i>replace</i> semua tanda koma menjadi karakter kosong (empty string). Lalu, berdasarkan kolom ini, tambahkan sebuah kolom bernama <i>lastname</i> yang berisi semua karakter sebelum tanda koma menggunakan fungsi SUBSTRING.</p> <pre>SELECT REPLACE([contactname], ',', '') AS contactname, SUBSTRING([contactname],1, CHARINDEX(',', [contactname]) -1) AS lastname FROM [Sales].[Customers];</pre> |



2

Eksekusi query pada langkah 1 di atas dan screenshot hasilnya. Bandingkan dengan hasil yang ditunjukkan pada gambar berikut ini:

| Results | | Messages |
|---------|----------------------|--------------|
| | contactname | lastname |
| 1 | Allen Michael | Allen |
| 2 | Hassall Mark | Hassall |
| 3 | Peoples John | Peoples |
| 4 | Arndt Torsten | Arndt |
| 5 | Higginbotham Tom | Higginbotham |
| 6 | Poland Carole | Poland |
| 7 | Bansal Dushyant | Bansal |
| 8 | Ilyina Julia | Ilyina |
| 9 | Raghav Amritansh | Raghav |
| 10 | Bassols Pilar Colome | Bassols |

EIPTP8V (15.0 RTM) | DESKTOP-EIPTP8V\milyu ... | TSQL | 00:00:00 | 91 rows

| Results | | Messages |
|---------|----------------------|--------------|
| | contactname | lastname |
| 1 | Allen Michael | Allen |
| 2 | Hassall Mark | Hassall |
| 3 | Peoples John | Peoples |
| 4 | Arndt Torsten | Arndt |
| 5 | Higginbotham Tom | Higginbotham |
| 6 | Poland Carole | Poland |
| 7 | Bansal Dushyant | Bansal |
| 8 | Ilyina Julia | Ilyina |
| 9 | Raghav Amritansh | Raghav |
| 10 | Bassols Pilar Colome | Bassols |
| 11 | Jaffe David | Jaffe |
| 12 | Ray Mike | Ray |
| 13 | Benito Almudena | Benito |
| 14 | Jelitto Jacek | Jelitto |

✓ Query executed successfully.

Praktikum – Bagian 11: Menulis query SELECT untuk mengubah kode customer

| Langkah | Keterangan |
|---------|--|
| 1 | <p>[Soal-15] Tulislah sebuah query SELECT untuk menampilkan kolom <i>custid</i> dari tabel <i>Sales.Customers</i>. Berdasarkan kolom ini, tambahkan sebuah kolom yang berisi 6 digit kode customer, dengan format diawali huruf C dan 0 di depannya. Misalnya, <i>custid</i> dengan kode 1 ditampilkan sebagai C00001, dst.</p> <pre> SELECT [custid], 'C' + RIGHT('0000' + CAST([custid] AS varchar(6)),6) AS newcustid FROM [Sales].[Customers]; </pre> |



2

Eksekusi query pada langkah 1 di atas dan *screenshot* hasilnya. Bandingkan dengan hasil yang ditunjukkan pada gambar berikut ini:

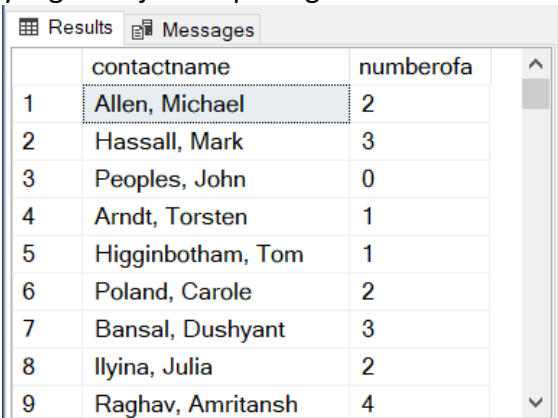
| Results Messages | | | Results Messages | | |
|------------------|--------|-----------|------------------|--------|-----------|
| | custid | newcustid | | custid | newcustid |
| 1 | 1 | C0001 | 1 | 1 | C00001 |
| 2 | 2 | C0002 | 2 | 2 | C00002 |
| 3 | 3 | C0003 | 3 | 3 | C00003 |
| 4 | 4 | C0004 | 4 | 4 | C00004 |
| 5 | 5 | C0005 | 5 | 5 | C00005 |
| 6 | 6 | C0006 | 6 | 6 | C00006 |
| 7 | 7 | C0007 | 7 | 7 | C00007 |
| 8 | 8 | C0008 | 8 | 8 | C00008 |
| 9 | 9 | C0009 | 9 | 9 | C00009 |
| | | | 10 | 11 | C00011 |
| | | | 11 | 12 | C00012 |
| | | | 12 | 13 | C00013 |
| | | | 13 | 14 | C00014 |
| | | | 14 | 16 | C00016 |

DESKTOP-EIPTP8V\milyu ... | TSQL | 00:00:00 | 91 rows

Query executed successfully.

Ada perbedaan jumlah '0' karena mengikuti perintah pada tahap 1

Praktikum – Bagian 14: Menulis query SELECT untuk menampilkan banyaknya kemunculan karakter

| Langkah | Keterangan | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---------|---|-----------|-------------|-----------|---|----------------|---|---|---------------|---|---|---------------|---|---|----------------|---|---|-------------------|---|---|----------------|---|---|------------------|---|---|---------------|---|---|-------------------|---|
| 1 | <p>[Soal-16] Tulislah sebuah query SELECT untuk menampilkan kolom <i>contactname</i> dari tabel <i>Sales.Customers</i>. Berdasarkan kolom ini, tambahkan sebuah kolom yang menampilkan banyaknya karakter 'a' pada nama kontak. (Petunjuk: Gunakan fungsi string <code>REPLACE</code> dan <code>LEN</code>). Urutkan hasilnya dari yang terbanyak.</p> <pre>SELECT [contactname], LEN([contactname]) - LEN(REPLACE([contactname], 'a', '')) AS numberofa FROM [Sales].[Customers] ORDER BY numberofa DESC;</pre> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | <p>Eksekusi query pada langkah 1 di atas dan <i>screenshot</i> hasilnya. Bandingkan dengan hasil yang ditunjukkan pada gambar berikut ini:</p>  <table border="1"><thead><tr><th></th><th>contactname</th><th>numberofa</th></tr></thead><tbody><tr><td>1</td><td>Allen, Michael</td><td>2</td></tr><tr><td>2</td><td>Hassall, Mark</td><td>3</td></tr><tr><td>3</td><td>Peoples, John</td><td>0</td></tr><tr><td>4</td><td>Arndt, Torsten</td><td>1</td></tr><tr><td>5</td><td>Higginbotham, Tom</td><td>1</td></tr><tr><td>6</td><td>Poland, Carole</td><td>2</td></tr><tr><td>7</td><td>Bansal, Dushyant</td><td>3</td></tr><tr><td>8</td><td>Ilyina, Julia</td><td>2</td></tr><tr><td>9</td><td>Raghav, Amritansh</td><td>4</td></tr></tbody></table> <p>DESKTOP-EIPTP8V\milyu ... TSQL 00:00:00 91 rows</p> | | contactname | numberofa | 1 | Allen, Michael | 2 | 2 | Hassall, Mark | 3 | 3 | Peoples, John | 0 | 4 | Arndt, Torsten | 1 | 5 | Higginbotham, Tom | 1 | 6 | Poland, Carole | 2 | 7 | Bansal, Dushyant | 3 | 8 | Ilyina, Julia | 2 | 9 | Raghav, Amritansh | 4 |
| | contactname | numberofa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Allen, Michael | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Hassall, Mark | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Peoples, John | 0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | Arndt, Torsten | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Higginbotham, Tom | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Poland, Carole | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Bansal, Dushyant | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Ilyina, Julia | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Raghav, Amritansh | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



| | Results | Messages | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|----|---|-----------|-------------|-----------|---|-------------------|---|---|--------------------------------|---|---|---------------|---|---|--------------------|---|---|-------------------|---|---|----------------|---|---|-------------------|---|---|---------------------------|---|---|--------------------------|---|----|-----------------------|---|----|--------------------|---|----|------------------|---|----|-----------------------|---|----|---------------------|---|--|
| | <table> <thead> <tr> <th></th><th>contactname</th><th>numberofa</th></tr> </thead> <tbody> <tr><td>1</td><td>Raghav, Amritansh</td><td>4</td></tr> <tr><td>2</td><td>Bueno, Janaina Burdan, Neville</td><td>4</td></tr> <tr><td>3</td><td>Khanna, Karan</td><td>4</td></tr> <tr><td>4</td><td>San Juan, Patricia</td><td>4</td></tr> <tr><td>5</td><td>Marinova, Nadejda</td><td>4</td></tr> <tr><td>6</td><td>Syamala, Manoj</td><td>4</td></tr> <tr><td>7</td><td>Larsson, Katarina</td><td>4</td></tr> <tr><td>8</td><td>Tuntisangaroon, Sittichai</td><td>3</td></tr> <tr><td>9</td><td>Wojciechowska, Agnieszka</td><td>3</td></tr> <tr><td>10</td><td>Sunkammurali, Krishna</td><td>3</td></tr> <tr><td>11</td><td>Szymczak, Radosław</td><td>3</td></tr> <tr><td>12</td><td>Boseman, Randall</td><td>3</td></tr> <tr><td>13</td><td>Kolesnikova, Katerina</td><td>3</td></tr> <tr><td>14</td><td>Shabalin, Rostislav</td><td>3</td></tr> </tbody> </table> | | contactname | numberofa | 1 | Raghav, Amritansh | 4 | 2 | Bueno, Janaina Burdan, Neville | 4 | 3 | Khanna, Karan | 4 | 4 | San Juan, Patricia | 4 | 5 | Marinova, Nadejda | 4 | 6 | Syamala, Manoj | 4 | 7 | Larsson, Katarina | 4 | 8 | Tuntisangaroon, Sittichai | 3 | 9 | Wojciechowska, Agnieszka | 3 | 10 | Sunkammurali, Krishna | 3 | 11 | Szymczak, Radosław | 3 | 12 | Boseman, Randall | 3 | 13 | Kolesnikova, Katerina | 3 | 14 | Shabalin, Rostislav | 3 | |
| | contactname | numberofa | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | Raghav, Amritansh | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Bueno, Janaina Burdan, Neville | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Khanna, Karan | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4 | San Juan, Patricia | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | Marinova, Nadejda | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6 | Syamala, Manoj | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Larsson, Katarina | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 8 | Tuntisangaroon, Sittichai | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9 | Wojciechowska, Agnieszka | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 10 | Sunkammurali, Krishna | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 11 | Szymczak, Radosław | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Boseman, Randall | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Kolesnikova, Katerina | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 14 | Shabalin, Rostislav | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <div> Query executed successfully. </div> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Ada perbedaan pada kolom numberofa yang urut dari 'a' terbanyak karena mengikuti perintah pada tahap 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Kesimpulan: Setelah ujicoba dilakukan, mahasiswa dapat mengetahui bagaimana menggunakan berbagai fungsi karakter | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

-- Selamat Mengerjakan --