

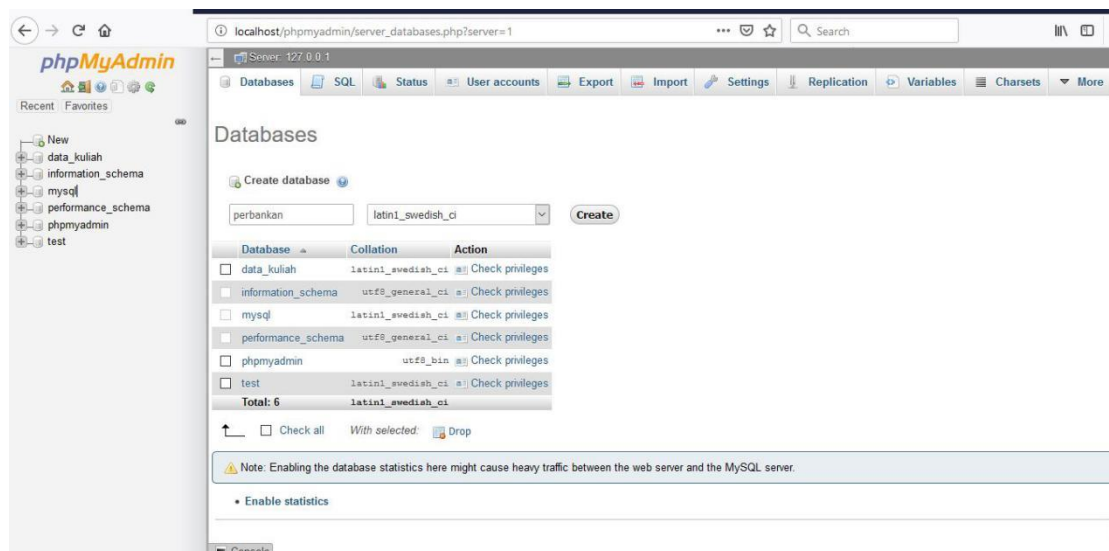
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MODUL 5

1. Membuat database dengan nama perbankan



2. Membuka command prompt dan pilih database perbankan dengan perintah *"use perbankan"* sehingga akan muncul pemberitahuan **"database changed"**

3. Memasukkan data dari table berikut:

- a. table nasabah
- b. table cabang_bank
- c. table rekening
- d. table nasabah_has_rekening
- e. table transaksi

```

C:\ Command Prompt - mysql -u root -p
Microsoft Windows [Version 10.0.10240]
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C:\Users\ASUS 1>cd\

C:\>cd c:\xampp\mysql\bin

c:\xampp\mysql\bin>mysql -u root -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MariaDB connection id is 51
Server version: 10.1.38-MariaDB mariadb.org binary distribution

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

MariaDB [(none)]> use perbankan;
Database changed
MariaDB [perbankan]> insert into nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values
-> (1, 'Sutopo', 'JL. Jendral Sudirman 12'),
->
-> (2, 'Maryati', 'JL. MT. Haryono'),
->
-> (3, 'Superman', 'JL. Hasanudin 81'),
->
-> (4, 'Kartika Padmasari', 'JL. Manggisa 15'),
->
-> (5, 'Budi Eko Prayogo', 'JL. Kantil 30'),
->
-> (6, 'Satria Eka Jaya', 'JL. Slamet Riyadi 45'),
->
-> (7, 'Indri Hapsari', 'JL. Sutoyo 5'),
->
-> (8, 'Sari Murti', 'JL. Pangandaran 11'),
->
-> (9, 'Canka Lokananta', 'JL. Tidar 86'),
->
-> (10, 'Budi Murtono', 'JL. Merak 22');
Query OK, 10 rows affected (0.05 sec)
Records: 10  Duplicates: 0  Warnings: 0

MariaDB [perbankan]> insert into cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values
-> ('BRUS', 'Bank Rut Unit Surakarta', 'JL. Slamet Riyadi 18'),
-> ('BRUM', 'Bank Rut Unit Magelang', 'JL. P.Tendean 63'),
-> ('BRUB', 'Bank Rut Unit Boyolali', 'JL. Ahmad Yani 45'),
-> ('BRUK', 'Bank Rut Unit Klaten', 'JL. Superman 23'),
-> ('BRUY', 'Bank Rut Unit Yogyakarta', 'JL. Anggrek 21'),
-> ('BRUW', 'Bank Rut Unit Wonogiri', 'JL. Untung Suropati 12');
Query OK, 6 rows affected (0.08 sec)
Records: 6  Duplicates: 0  Warnings: 0

```

```

MariaDB [perbankan]> insert into rekening(no_rekening, kode_cabang, pin, saldo) values
-> (101, 'BRUS', 1111, 500000),
-> (102, 'BRUS', 2222, 350000),
-> (103, 'BRUS', 3333, 750000),
-> (104, 'BRUM', 4444, 900000),
-> (105, 'BRUM', 5555, 2000000),
-> (106, 'BRUS', 6666, 3000000),
-> (107, 'BRUS', 7777, 1000000),
-> (108, 'BRUB', 8888, 5000000),
-> (109, 'BRUB', 9999, 0),
-> (110, 'BRUY', 1234, 550000),
-> (111, 'BRUK', 4321, 150000),
-> (112, 'BRUK', 0123, 300000),
-> (113, 'BRUY', 8888, 255000);
Query OK, 13 rows affected (0.08 sec)
Records: 13 Duplicates: 0 Warnings: 0

```

```

MariaDB [perbankan]> insert into nasabah_has_rekening(id_nasabah, no_rekening) values
-> (1, 104),
-> (2, 103),
-> (3, 105),
-> (3, 106),
-> (4, 101),
-> (4, 107),
-> (5, 102),
-> (5, 107),
-> (6, 109),
-> (7, 109),
-> (8, 111),
-> (9, 110),
-> (10, 113),
-> (8, 112),
-> (10, 108);
Query OK, 15 rows affected (0.12 sec)
Records: 15 Duplicates: 0 Warnings: 0

```

```

MariaDB [perbankan]> insert into transaksi(no_transaksi, no_rekening, id_nasabah, jenis_transaksi, tanggal, jumlah) values
-> (1, 105, 3, 'debit', 2009-11-10, 50000),
-> (2, 103, 2, 'debit', 2009-11-10, 40000),
-> (3, 101, 4, 'kredit', 2009-11-10, 20000),
-> (4, 106, 3, 'debit', 2009-11-13, 50000),
-> (5, 107, 5, 'kredit', 2009-11-13, 30000),
-> (6, 104, 1, 'kredit', 2009-11-15, 200000),
-> (7, 110, 9, 'kredit', 2009-11-19, 150000),
-> (8, 102, 5, 'debit', 2009-11-16, 20000),
-> (9, 105, 3, 'kredit', 2009-11-18, 50000),
-> (10, 107, 4, 'debit', 2009-11-19, 100000),
-> (11, 103, 2, 'debit', 2009-11-19, 100000),
-> (12, 104, 1, 'debit', 2009-11-19, 50000),
-> (13, 107, 4, 'kredit', 2009-11-20, 200000),
-> (14, 105, 3, 'debit', 2009-11-21, 20000),
-> (15, 104, 1, 'kredit', 2009-11-22, 100000),
-> (16, 101, 4, 'kredit', 2009-11-22, 20000),
-> (17, 103, 2, 'debit', 2009-11-22, 20000),
-> (18, 102, 5, 'debit', 2009-11-25, 50000),
-> (19, 108, 10, 'debit', 2009-11-26, 100000),
-> (20, 106, 3, 'kredit', 2009-11-27, 50000),
-> (21, 103, 2, 'kredit', 2009-11-28, 200000),
-> (22, 105, 3, 'kredit', 2009-11-28, 100000),
-> (23, 102, 5, 'debit', 2009-11-30, 20000),
-> (24, 104, 1, 'debit', 2009-12-1, 50000),
-> (25, 103, 2, 'debit', 2009-12-2, 40000),
-> (26, 101, 4, 'debit', 2009-12-4, 50000),
-> (27, 103, 2, 'kredit', 2009-12-5, 100000),
-> (28, 102, 5, 'kredit', 2009-12-5, 200000),
-> (29, 109, 7, 'debit', 2009-12-5, 100000),
-> (30, 110, 9, 'debit', 2009-12-16, 20000);
Query OK, 30 rows affected, 30 warnings (0.85 sec)
Records: 30 Duplicates: 0 Warnings: 30

```

4. Melakukan update data nasabah untuk kasus2 berikut ini:

a. Nasabah dg nama “Idri Hapsari” pindah alamat ke “Jalan Slamet Riyadi No.34”

```
MariaDB [perbankan]> update nasabah set alamat_nasabah='Jalan Slamet Riyadi No. 34' WHERE nama_nasabah='Indri Hapsari';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [perbankan]> select * from nasabah;
```

id_nasabah	nama_nasabah	alamat_nasabah
1	Sutopo	Jl. Jendral Sudirman 12
2	Maryati	Jl. MT. Haryono
3	Suparman	Jl. Hasanudin 81
4	Kartika Padmasari	Jl. Manggisa 15
5	Budi Eko Prayogo	Jl. Kantil 30
6	Satria Eka Jaya	Jl. Slamet Riyadi 45
7	Indri Hapsari	Jalan Slamet Riyadi No. 34
8	Sari Murti	Jl. Pangandaran 11
9	Canka Lokananta	Jl. Tidar 86
10	Budi Murtono	Jl. Merak 22

```
10 rows in set (0.00 sec)
```

b. Cabang dengan kode “BRUW” pindah alamat ke “Jalan A. Yani No. 23”

```
MariaDB [perbankan]> update cabang_bank set alamat_cabang='Jalan A. Yani No. 23' WHERE kode_cabang='BRUW';
Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MariaDB [perbankan]> select * from cabang_bank;
```

kode_cabang	nama_cabang	alamat_cabang
BRUB	Bank Rut Unit Boyolali	Jl. Ahmad Yani 45
BRUK	Bank Rut Unit Klaten	Jl. Suparman 23
BRUM	Bank Rut Unit Magelang	Jl. P.Tendean 63
BRUS	Bank Rut Unit Surakarta	Jl. Slamet Riyadi 18
BRUW	Bank Rut Unit Wonogiri	Jalan A. Yani No. 23
BRUY	Bank Rut Unit Yogyakarta	Jl. Anggrek 21

```
6 rows in set (0.00 sec)
```

5. Melakukan penghapusan untuk kasus2 berikut:

a. Nasabah dengan id “7” menutup rekeningnya

```
MariaDB [perbankan]> delete from nasabah WHERE id_nasabah=7;
ERROR 1451 (23000): Cannot delete or update a parent row: a foreign key constraint fails ('perbankan', 'transaksi', CONSTRAINT 'transaksi_ibfk_1' FOREIGN KEY ('id_nasabah') REFERENCES 'nasabah' ('id_nasabah'))
```

b. cabang dengan nama_cabang “Bank Rut Unit Magelang” menutup kantornya

```
MariaDB [perbankan]> delete from cabang_bank WHERE nama_cabang='Bank Rut Unit Magelang';
Query OK, 1 row affected (0.02 sec)

MariaDB [perbankan]> select * from cabang_bank;
```

kode_cabang	nama_cabang	alamat_cabang
BRUB	Bank Rut Unit Boyolali	Jl. Ahmad Yani 45
BRUK	Bank Rut Unit Klaten	Jl. Suparman 23
BRUS	Bank Rut Unit Surakarta	Jl. Slamet Riyadi 18
BRUW	Bank Rut Unit Wonogiri	Jalan A. Yani No. 23
BRUY	Bank Rut Unit Yogyakarta	Jl. Anggrek 21

```
5 rows in set (0.00 sec)
```

1. Menambah 10 data ke dalam table nasabah

```
MariaDB [perbankan]> INSERT INTO nasabah(id_nasabah, nama_nasabah, alamat_nasabah) values
-> (11, 'Nafi', 'Jl. Samratulangi 29'),
-> (12, 'Mudzakkir Zain', 'Jl. Thomas M. 30'),
-> (13, 'Tika', 'Jl. Kesatria 90'),
-> (14, 'Fara', 'Jl. Mangga 15'),
-> (15, 'Sintia', 'Jl. Mawar 38'),
-> (16, 'Anis Nur', 'Jl. Merdeka 8'),
-> (17, 'Noviana', 'Jl. Supomo10'),
-> (18, 'Liana Zaidah', 'Jl. Moh. Hatta 12'),
-> (19, 'Iis', 'Jl. Karangtumaritis 34'),
-> (20, 'Faridani', 'Jl. Gagak 67');
Query OK, 10 rows affected (0.06 sec)
Records: 10  Duplicates: 0  Warnings: 0

MariaDB [perbankan]> select * from nasabah;
+-----+-----+-----+
| id_nasabah | nama_nasabah | alamat_nasabah |
+-----+-----+-----+
| 1 | Sutopo | Jl. Jendral Sudirman 12 |
| 2 | Maryati | Jl. MT. Haryono 31 |
| 3 | Suparman | Jl. Hasanudin 81 |
| 4 | Kartika Padmasari | Jl. Manggis 15 |
| 5 | Budi Eko Prayogo | Jl. Kantil 30 |
| 6 | Satria Eka Jaya | Jl. Slamet Riyadi 45 |
| 8 | Sari Murti | Jl. Pangandaran 11 |
| 9 | Canka Lokananta | Jl. Tidar 86 |
| 10 | Budi Murtono | Jl. Merak 22 |
| 11 | Nafi | Jl. Samratulangi 29 |
| 12 | Mudzakkir Zain | Jl. Thomas M. 30 |
| 13 | Tika | Jl. Kesatria 90 |
| 14 | Fara | Jl. Mangga 15 |
| 15 | Sintia | Jl. Mawar 38 |
| 16 | Anis Nur | Jl. Merdeka 8 |
| 17 | Noviana | Jl. Supomo10 |
| 18 | Liana Zaidah | Jl. Moh. Hatta 12 |
| 19 | Iis | Jl. Karangtumaritis 34 |
| 20 | Faridani | Jl. Gagak 67 |
+-----+-----+-----+
19 rows in set (0.00 sec)

MariaDB [perbankan]>
```


2. Menambah 10 data ke dalam table cabang_bank

```
MariaDB [perbankan]> INSERT INTO cabang_bank(kode_cabang, nama_cabang, alamat_cabang) values
-> ('BRUN','Bank Rut Unit Nabire','Jl. Samratulangi 19'),
-> ('BRUD','Bank Rut Unit Demak','Jl. Soekarno 65'),
-> ('BRUC','Bank Rut Unit Cilacap','Jl. Tidore 43'),
-> ('BRUJ','Bank Rut Unit Jepara','Jl. Merak 22'),
-> ('BRUG','Bank Rut Unit Grobogan','Jl. Kamboja 15'),
-> ('BRUP','Bank Rut Unit Pati','Jl. Pattimura 19'),
-> ('BRUE','Bank Rut Unit Enaro','Jl. Timun Mas 42'),
-> ('BRUA','Bank Rut Unit Alor','Jl. Buto Ijo 21'),
-> ('BRUT','Bank Rut Unit Temanggung','Jl. Jakarta 45'),
-> ('BRUL','Bank Rut Unit Lebak','Jl. Gatot Kaca 14'),
-> ('BRUI','Bank Rut Unit Indramayu','Jl. Malioboro 15'),
-> ('BRUF','Bank Rut Unit Flores','Jl. Kartini 39');
Query OK, 12 rows affected (0.14 sec)
Records: 12  Duplicates: 0  Warnings: 0

MariaDB [perbankan]> select * from cabang_bank;
+-----+-----+-----+
| kode_cabang | nama_cabang          | alamat_cabang          |
+-----+-----+-----+
| BRUA        | Bank Rut Unit Alor   | Jl. Buto Ijo 21       |
| BRUB        | Bank Rut Unit Boyolali | jl. Ahmad yani 45     |
| BRUC        | Bank Rut Unit Cilacap | Jl. Tidore 43         |
| BRUD        | Bank Rut Unit Demak   | Jl. Soekarno 65       |
| BRUE        | Bank Rut Unit Enaro   | Jl. Timun Mas 42      |
| BRUF        | Bank Rut Unit Flores  | Jl. Kartini 39        |
| BRUG        | Bank Rut Unit Grobogan | Jl. Kamboja 15        |
| BRUI        | Bank Rut Unit Indramayu | Jl. Malioboro 15      |
| BRUJ        | Bank Rut Unit Jepara  | Jl. Merak 22          |
| BRUK        | Bank Rut Unit Klaten  | jl. Suparman 23       |
| BRUL        | Bank Rut Unit Lebak   | Jl. Gatot Kaca 14     |
| BRUN        | Bank Rut Unit Nabire  | Jl. Samratulangi 19   |
| BRUP        | Bank Rut Unit Pati    | Jl. Pattimura 19      |
| BRUS        | Bank Rut Unit Surakarta | jl. Slamet Riyadi 18  |
| BRUT        | Bank Rut Unit Temanggung | Jl. Jakarta 45       |
| BRUW        | Bank Rut Unit Wonogiri | Jl. A. Yani 23        |
| BRUY        | Bank Rut Unit Yogyakarta | jl. Anggrek 21       |
+-----+-----+-----+
17 rows in set (0.00 sec)

MariaDB [perbankan]>
```

3. Menambah 10 data ke dalam table rekening

```
MariaDB [perbankan]> INSERT INTO rekening(no_rekening, kode_cabangFK, pin, saldo)
values
-> (114,'BRUA','1112',600000),
-> (115,'BRUF','2223',50000),
-> (116,'BRUC','3334',70000),
-> (117,'BRUT','4445',800000),
-> (118,'BRUN','5556',1000000),
-> (119,'BRUL','6667',300000),
-> (120,'BRUI','7778',900000),
-> (121,'BRUG','8889',1000000),
-> (122,'BRUP','9990',400000),
-> (123,'BRUJ','1230',500000);
Query OK, 10 rows affected (0.13 sec)
Records: 10 Duplicates: 0 Warnings: 0

MariaDB [perbankan]> select * from rekening;
```

no_rekening	kode_cabangFK	pin	saldo
101	BRUS	1111	500000
102	BRUS	2222	350000
103	BRUS	3333	750000
104	BRUM	4444	900000
105	BRUW	5555	200000
106	BRUS	6666	300000
107	BRUS	7777	100000
108	BRUB	0000	500000
109	BRUS	9999	0
110	BRUY	1234	550000
111	BRUK	4321	150000
112	BRUK	0123	300000
113	BRUY	8888	255000
114	BRUA	1112	600000
115	BRUF	2223	50000
116	BRUC	3334	70000
117	BRUT	4445	800000
118	BRUN	5556	1000000
119	BRUL	6667	300000
120	BRUI	7778	900000
121	BRUG	8889	1000000
122	BRUP	9990	400000
123	BRUJ	1230	500000

4. Menambah 10 data ke dalam table nasabah_has_rekening

```
MariaDB [perbankan]> INSERT INTO nasabah_has_rekening(id_nasabahFK, no_rekeningFK) values
-> (11,123),
-> (12,122),
-> (13,121),
-> (13,120),
-> (15,119),
-> (16,118),
-> (17,117),
-> (18,116),
-> (19,115),
-> (20,114);
Query OK, 10 rows affected (0.14 sec)
Records: 10 Duplicates: 0 Warnings: 0

MariaDB [perbankan]> select * from nasabah_has_rekening;
+-----+-----+
| id_nasabahFK | no_rekeningFK |
+-----+-----+
| 1 | 104 |
| 2 | 103 |
| 3 | 105 |
| 3 | 106 |
| 4 | 101 |
| 4 | 107 |
| 5 | 102 |
| 5 | 107 |
| 6 | 109 |
| 7 | 111 |
| 8 | 112 |
| 9 | 110 |
| 10 | 108 |
| 10 | 113 |
| 11 | 123 |
| 12 | 122 |
| 13 | 120 |
| 13 | 121 |
| 15 | 119 |
| 16 | 118 |
| 17 | 117 |
| 18 | 116 |
| 19 | 115 |
| 20 | 114 |
```


5. Menambah 20 data ke dalam table transaksi

```
MariaDB [perbankan]> INSERT INTO transaksi(no_transaksi, no_rekeningFK, id_nasabahFK, jenis_transaksi, tanggal, jumlah) VALUES
-> (31,122,3,'debit','2009-12-10',90000),
-> (32,121,2,'debit','2009-12-13',40000),
-> (33,120,4,'kredit','2009-12-18',50000),
-> (34,119,3,'debit','2009-12-20',100000),
-> (35,117,5,'kredit','2009-12-27',20000),
-> (36,118,1,'kredit','2010-01-05',100000),
-> (37,115,9,'kredit','2010-01-07',100000),
-> (38,116,5,'debit','2010-01-09',90000),
-> (39,112,3,'kredit','2010-01-18',200000),
-> (40,120,4,'debit','2010-01-20',100000),
-> (41,113,2,'debit','2010-01-21',50000),
-> (42,114,1,'debit','2010-01-23',80000),
-> (43,117,4,'kredit','2010-01-25',100000),
-> (44,118,3,'debit','2010-02-01',100000),
-> (45,116,1,'kredit','2010-02-02',100000),
-> (46,119,4,'kredit','2010-02-10',200000),
-> (47,110,2,'debit','2010-02-12',50000),
-> (48,102,5,'debit','2010-02-13',100000),
-> (49,108,10,'debit','2010-02-14',200000),
-> (50,106,3,'kredit','2010-02-15',50000);
Query OK, 20 rows affected (0.14 sec)
Records: 20  Duplicates: 0  Warnings: 0
```

```
MariaDB [perbankan]> select * from transaksi;
```

no_transaksi	id_nasabahFK	no_rekeningFK	jenis_transaksi	tanggal	jumlah
1	3	105	debit	2009-11-10	50000
2	2	103	debit	2009-11-10	40000
3	4	101	kredit	2009-11-12	20000
4	3	106	debit	2009-11-13	50000
5	5	107	kredit	2009-11-13	30000
6	1	104	kredit	2009-11-15	200000
7	9	110	kredit	2009-11-15	150000
8	5	102	debit	2009-11-16	20000
9	3	105	kredit	2009-11-18	50000
10	4	107	debit	2009-11-19	100000
11	2	103	debit	2009-11-19	100000
12	1	104	debit	2009-11-19	50000
13	4	107	kredit	2009-11-20	200000
14	3	105	debit	2009-11-21	40000
15	1	104	kredit	2009-11-22	100000
16	4	101	kredit	2009-11-22	20000
17	2	103	debit	2009-11-22	50000
18	5	102	debit	2009-11-25	50000
19	10	108	debit	2009-11-26	100000
20	3	106	kredit	2009-11-27	50000
21	2	103	kredit	2009-11-28	200000
22	3	102	kredit	2009-11-28	100000
23	5	105	debit	2009-11-30	20000
24	1	104	debit	2009-12-01	50000
25	2	103	debit	2009-12-02	40000
26	4	101	debit	2009-12-04	50000
27	2	103	kredit	2009-12-05	100000
28	5	102	kredit	2009-12-05	200000
29	7	109	debit	2009-12-05	100000
30	9	110	debit	2009-12-06	20000
31	3	122	debit	2009-12-10	90000
32	2	121	debit	2009-12-13	40000
33	4	120	kredit	2009-12-18	50000
34	3	119	debit	2009-12-20	100000
35	5	117	kredit	2009-12-27	20000
36	1	118	kredit	2010-01-05	100000
37	9	115	kredit	2010-01-07	100000
38	5	116	debit	2010-01-09	90000
39	3	112	kredit	2010-01-18	200000
39	3	112	kredit	2010-01-18	200000
40	4	120	debit	2010-01-20	100000
41	2	113	debit	2010-01-21	50000
42	1	114	debit	2010-01-23	80000
43	4	117	kredit	2010-01-25	100000
44	3	118	debit	2010-02-01	100000
45	1	116	kredit	2010-02-02	100000
46	4	119	kredit	2010-02-10	200000
47	2	110	debit	2010-02-12	50000
48	5	102	debit	2010-02-13	100000
49	10	108	debit	2010-02-14	200000
50	3	106	kredit	2010-02-15	50000

```
50 rows in set (0.00 sec)
```