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Praktikum Sistem Basis Data Modul 11

Latihan

4.

The image shows two windows. The top window is a Python 3.7.4 Shell with a menu bar (File, Edit, Shell, Debug, Options, Window, Help). It displays the execution of a script named `ekstensi.py` located at `C:\Users\kevin\Pictures\prak basis data\MODUL_11\ekstensi.py`. The script imports `datetime` and `mysql.connector`, connects to a database named `perbankan` using the `root` user, and executes an `INSERT` statement to add a new transaction record. The script then commits the transaction, closes the cursor, and closes the connection.

```
from datetime import date, datetime, timedelta
import mysql.connector

cnx = mysql.connector.connect(user='root', database='perbankan')
cursor = cnx.cursor()
tanggal = datetime.now().date()
tambah_transaksi=("INSERT INTO transaksi(id_nasabahFK,no_rekeningFK,jenis_transa
data_transaksi = ('9','110','kredit',tanggal,'50000')
cursor.execute(tambah_transaksi,data_transaksi)

cnx.commit()
cursor.close()
cnx.close()
```

The bottom window is a MySQL Command Prompt titled `Command Prompt - mysql -u root -p`. It displays a table of transaction records. The table has 6 columns: an index, an account number, a transaction type, a date, and an amount. The records are numbered 20 to 36. The record with index 36 is highlighted with a yellow box, showing a credit transaction of 50,000 on 2020-05-21 for account 110.

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	2009-12-01	50000
25	103	2	debit	2009-12-02	40000
26	101	4	debit	0000-00-00	50000
27	103	2	kredit	0000-00-00	100000
28	102	5	kredit	0000-00-00	200000
29	109	7	debit	0000-00-00	100000
30	110	9	debit	0000-00-00	20000
31	105	3	debit	2009-12-04	50000
32	104	5	kredit	2009-12-06	80000
33	105	3	debit	2009-12-11	40000
34	107	2	kredit	2009-12-17	90000
35	104	4	debit	2009-12-04	50000
36	110	9	kredit	2020-05-21	50000

36 rows in set (0.06 sec)

5.

```

Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: C:\Users\kevin\Pictures\prak basis data\MODUL_11\ekstensi.py ===
>>>
=== RESTART: C:\Users\kevin\Pictures\prak basis data\MODUL_11\ekstensi.py ===
>>>
==== RESTART: C:\Users\kevin\Pictures\prak basis data\MODUL_11\select.py ====
nasabah dengan ID 9 melakukan transaksi kredit pada 21 May 2020 sejumlah 50000
>>>

select.py - C:\Users\kevin\Pictures\prak basis data\MODUL_11\select.py (3.7.4)
File Edit Format Run Options Window Help
from datetime import date, datetime, timedelta
import mysql.connector

cnx = mysql.connector.connect(user='root', database='perbankan')
cursor = cnx.cursor()
query = ("SELECT id_nasabahFK, jenis_transaksi, tanggal, jumlah FROM transaksi WHERE id_nasabahFK=9")
cursor.execute(query)
for (id_nasabahFK, jenis_transaksi, tanggal, jumlah) in cursor:
    print("nasabah dengan ID {} melakukan transaksi {} pada {:d %b %Y} sejumlah {}".format(id_nasabahFK, jenis_transaksi, tanggal, jumlah))
cursor.close()
cnx.close()

```

Tugas

1. Insert data transaksi

```

ekstensi.py - C:\Users\kevin\Pictures\prak basis data\MODUL_11\ekstensi.py
File Edit Format Run Options Window Help
from datetime import date, datetime, timedelta
import mysql.connector

cnx = mysql.connector.connect(user='root', database='perbankan')
cursor = cnx.cursor()
tanggal = datetime.now().date()
tambah_transaksi = ("INSERT INTO transaksi(id_nasabahFK, jenis_transaksi, tanggal, jumlah) VALUES(9, 'debit', '%s', 758000)" % tanggal)
cursor.execute(tambah_transaksi)

cnx.commit()
cursor.close()
cnx.close()

Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
=== RESTART: C:\Users\kevin\Pictures\prak basis data\MODUL_11\ekstensi.py ===
>>>

```

```

C:\Users\kevin>mysql -u root -p
mysql> SELECT * FROM transaksi;
+----+-----+-----+-----+-----+-----+
| id | id_nasabahFK | jenis_transaksi | tanggal          | jumlah |
+----+-----+-----+-----+-----+
| 20 | 106          | kredit         | 2009-11-27       | 50000  |
| 21 | 103          | kredit         | 2009-11-28       | 200000 |
| 22 | 105          | kredit         | 2009-11-28       | 100000 |
| 23 | 102          | debit          | 2009-11-30       | 20000  |
| 24 | 104          | debit          | 2009-12-01       | 50000  |
| 25 | 103          | debit          | 2009-12-02       | 40000  |
| 26 | 101          | debit          | 0000-00-00       | 50000  |
| 27 | 103          | kredit         | 0000-00-00       | 100000 |
| 28 | 102          | kredit         | 0000-00-00       | 200000 |
| 29 | 109          | debit          | 0000-00-00       | 100000 |
| 30 | 110          | debit          | 0000-00-00       | 20000  |
| 31 | 105          | debit          | 2009-12-04       | 50000  |
| 32 | 104          | kredit         | 2009-12-06       | 80000  |
| 33 | 105          | debit          | 2009-12-11       | 40000  |
| 34 | 107          | debit          | 2009-12-17       | 90000  |
| 36 | 110          | kredit         | 2020-05-21       | 50000  |
| 37 | 111          | debit          | 2020-05-21       | 758000 |
+----+-----+-----+-----+-----+
36 rows in set (0.00 sec)

```

Delete data transaksi

No_transaksi= 35 dihapus dari data transaksi

The screenshot shows a Python 3.7.4 Shell window on the left and a Command Prompt window on the right. The Python shell displays the execution of a script that connects to a MySQL database, deletes a transaction with ID 35, and prints a confirmation message. The Command Prompt shows the output of a SQL query, displaying a table of transactions with columns for ID, Account Number, Transaction Type, Amount, Date, and Balance. The transaction with ID 35 is highlighted in the output.

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, (Intel)] on win32
Type "help", "copyright", "credits" or "license()"
>>>
==== RESTART: C:/Users/kevin/Pictures/prak basis data/
Data berhasil dihapus
>>>
```

```
delete.py - C:/Users/kevin/Pictures/prak basis data/MODUL_11/delete.py (3.7.4)
File Edit Format Run Options Window Help
from datetime import date, datetime, timedelta
import mysql.connector

cnx = mysql.connector.connect(user='root', database='perbankan')
cursor = cnx.cursor()

delete_transaksi=("DELETE FROM transaksi WHERE no_transaksi=35")
cursor.execute(delete_transaksi)

cnx.commit()

print("Data berhasil dihapus")
```

```
Command Prompt - mysql -u root -p
+-----+-----+-----+-----+-----+-----+
22 |      | 105 |      | kredit | 2009-11-28 | 100000 |
23 |      | 102 |      | debit  | 2009-11-30 | 20000  |
24 |      | 104 |      | debit  | 2009-12-01 | 50000  |
25 |      | 103 |      | debit  | 2009-12-02 | 40000  |
26 |      | 101 |      | debit  | 0000-00-00 | 50000  |
27 |      | 103 |      | kredit | 0000-00-00 | 100000 |
28 |      | 102 |      | kredit | 0000-00-00 | 200000 |
29 |      | 109 |      | debit  | 0000-00-00 | 100000 |
30 |      | 110 |      | debit  | 0000-00-00 | 20000  |
31 |      | 105 |      | debit  | 2009-12-04 | 50000  |
32 |      | 104 |      | kredit | 2009-12-06 | 80000  |
33 |      | 105 |      | debit  | 2009-12-11 | 40000  |
34 |      | 107 |      | kredit | 2009-12-17 | 90000  |
36 |      | 110 |      | kredit | 2020-05-21 | 50000  |
+-----+-----+-----+-----+-----+
35 rows in set (0.00 sec)
```

Update data transaksi

The screenshot shows a Python 3.7.4 Shell window on the left and a Command Prompt window on the right. The Python shell displays the execution of a script that connects to a MySQL database, updates a transaction with ID 34, and prints a confirmation message. The Command Prompt shows the output of a SQL query, displaying a table of transactions with columns for ID, Account Number, Transaction Type, Amount, Date, and Balance. The transaction with ID 34 is highlighted in the output.

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22 (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more
>>>
==== RESTART: C:/Users/kevin/Pictures/prak basis data/MODUL_11/update.py (3.7.4)
Data berhasil di ubah
>>>
```

```
update.py - C:/Users/kevin/Pictures/prak basis data/MODUL_11/update.py (3.7.4)
File Edit Format Run Options Window Help
from datetime import date, datetime, timedelta
import mysql.connector

cnx = mysql.connector.connect(user='root', database='perbankan')
cursor = cnx.cursor()

delete_transaksi=("UPDATE transaksi SET jenis_transaksi=%s WHERE no_transaksi=%s")
value=("debit", "34")
cursor.execute(delete_transaksi, value)

cnx.commit()

print("Data berhasil di ubah")
```

```
Command Prompt - mysql -u root -p
+-----+-----+-----+-----+-----+-----+
25 |      | 103 |      | debit  | 2009-12-02 | 40000  |
26 |      | 101 |      | debit  | 0000-00-00 | 50000  |
27 |      | 103 |      | kredit | 0000-00-00 | 100000 |
28 |      | 102 |      | kredit | 0000-00-00 | 200000 |
29 |      | 109 |      | debit  | 0000-00-00 | 100000 |
30 |      | 110 |      | debit  | 0000-00-00 | 20000  |
31 |      | 105 |      | debit  | 2009-12-04 | 50000  |
32 |      | 104 |      | kredit | 2009-12-06 | 80000  |
33 |      | 105 |      | debit  | 2009-12-11 | 40000  |
34 |      | 107 |      | debit  | 2009-12-17 | 90000  |
36 |      | 110 |      | kredit | 2020-05-21 | 50000  |
+-----+-----+-----+-----+-----+
35 rows in set (0.00 sec)
```

2. Menampilkan data nasabah

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019) [Intel] on win32
Type "help", "copyright", "credits" or "license()" for more
>>>
===== RESTART: C:/Users/kevin/Pictures/prak basis data/MODUL_11/nasabah.py (3.7.4)
(1, 'sutopo', 'Jl. jendral sudirman 12')
(2, 'maryati', 'Jl. MT. Haryono 31')
(3, 'suparman', 'Jl. hasanudin 81')
(4, 'kartika padmasari', 'Jl. manggis 1')
(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')
(12, 'kevin', 'Sukoharjo')
>>>
```

```
nasabah.py - C:/Users/kevin/Pictures/prak basis data/MODUL_11/nasabah.py (3.7.4)
File Edit Format Run Options Window Help
import mysql.connector

cnx = mysql.connector.connect(user='root', database='perbankan')
cursor = cnx.cursor()
cursor.execute("SELECT * FROM nasabah")
nasabah = cursor.fetchall()
for x in nasabah:
    print(x)

cursor.close()
cnx.close()
```

3. Menampilkan transaksi antara bulan oktober sampai desember

```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019) [Intel] on win32
Type "help", "copyright", "credits" or "license()" for more
>>>
===== RESTART: C:/Users/kevin/Pictures/prak basis data/MODUL_11/nasabah.py (3.7.4)
(1, 'sutopo', 'Jl. jendral sudirman 12')
(2, 'maryati', 'Jl. MT. Haryono 31')
(3, 'suparman', 'Jl. hasanudin 81')
(4, 'kartika padmasari', 'Jl. manggis 1')
(5, 'budi eko prayogo', 'Jl. kantil 30')
(9, 'canka lokananta', 'Jl. tidar 86')
(10, 'budi murtono', 'Jl. merak 22')
>>>
```

```
*nasabah.py - C:/Users/kevin/Pictures/prak basis data/MODUL_11/nasabah.py (3.7.4)*
File Edit Format Run Options Window Help
import mysql.connector

cnx = mysql.connector.connect(user='root', database='perbankan')
cursor = cnx.cursor()
cursor.execute("""SELECT * FROM nasabah
                WHERE nasabah.id_nasabah IN(select transaksi.id_nasabahFK
                FROM transaksi where tanggal between '2009-11-10' AND '2009-12-06')""")
nasabah = cursor.fetchall()
for x in nasabah:
    print(x)

cursor.close()
cnx.close()
```