

TUGAS VIEWS DAN PROCEDURES
PRAKTIKUM MATA KULIAH MANAJEMEN BASIS DATA
PERTEMUAN ke-1



Disusun oleh:
Kelompok 3

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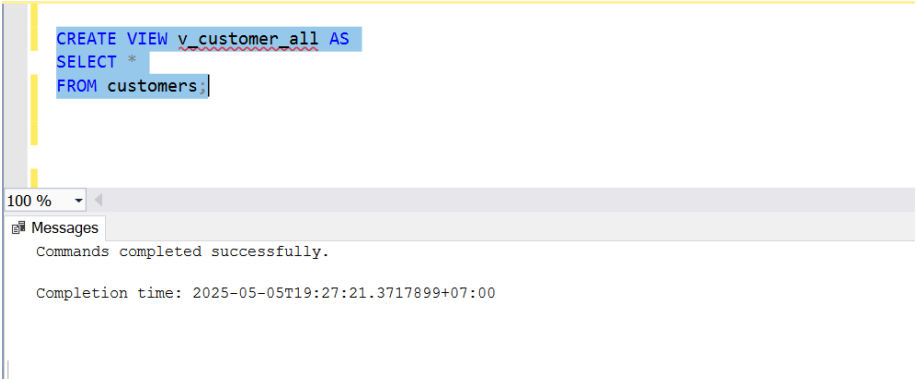
PROGRAM STUDI INFORMATIKA
FAKULTAS SAINS DAN MATEMATIKA
UNIVERSITAS DIPONEGORO

- **View**

- i. view v_customer_all menampilkan semua isi tabel customers.

- Query:
CREATE VIEW v_customer_all AS
SELECT *
FROM customers;

- Screenshot:

A screenshot of a SQL query results window. The query executed is:

```
CREATE VIEW v_customer_all AS  
SELECT *  
FROM customers;  
  
SELECT * FROM v_customer_all;
```

 The results are displayed in a table with 8 columns: customer_id, first_name, last_name, email, phone_number, address, and created_at. The table contains 17 rows of customer data.

customer_id	first_name	last_name	email	phone_number	address	created_at
1	Sergeant	Maih	sergeant.maih@aol.com	(512) 551-8311	11221 Bentwood Lane, Austin, Texas, United States...	2024-04-25 21:00
2	Shaine	Matic	shaine.matic@hotmail.com	(904) 114-8620	2563 Bladewood Court, Jacksonville, Florida, United...	2024-04-25 18:00
3	Buddie	Sandison	buddie.sandison@yahoo.co.uk	(205) 075-5889	8150 Peterson Place, Birmingham, Alabama, United...	2024-04-25 21:00
4	Stephanus	Frear	stephanus.frear@hotmail.com	(228) 427-9642	5521 Lancaster Lane, Gulfport, Mississippi, United St...	2024-04-25 21:00
5	Corette	Vicent	corette.vicent@hotmail.com	(860) 119-3127	12466 Usher Place, Hartford, Connecticut, United St...	2024-04-25 18:00
6	Devon	McQuode	devon.mcquode@laposte.net	(415) 371-6505	7668 Rainbow Blvd., San Francisco, California, Unite...	2024-04-25 18:00
7	Jacquenette	Hildrup	jacquenette.hildrup@gmail.com	(504) 592-9957	2042 Jonquil Place, New Orleans, Louisiana, United...	2024-04-25 22:00
8	Bobette	Shambrooke	bobette.shambrooke@hotmail.fr	(269) 629-9553	6747 Orgovan Avenue, Kalamazoo, Michigan, United...	2024-04-25 22:00
9	Donnajean	Amerighi	donnajean.amerighi@yahoo.de	(559) 566-8407	10301 Viking Place, Fresno, California, United States...	2024-04-25 21:00
10	Barbabra	Swires	barbabra.swires@hotmail.com	(570) 979-3301	6755 Inconvaia Way, Wilkes Barre, Pennsylvania, Unit...	2024-04-26 01:00
11	Sandro	Allen	sandro.allen@yahoo.com.br	(719) 485-8050	11759 Panigori Avenue, Colorado Springs, Colorado...	2024-04-25 18:00
12	Nester	Nicolls	nester.nicolls@hotmail.com	(864) 745-5159	294 Pamsh Place, Spartanburg, South Carolina, Unit...	2024-04-25 21:00
13	Rebekah	Conkie	rebekah.conkie@yahoo.co.jp	(407) 279-4605	6619 Nueva Place, Kissimmee, Florida, United States...	2024-04-26 01:00
14	Sidonnie	Marks	sidonnie.marks@gmail.com	(806) 099-5783	8993 Galtanos Place, Amarillo, Texas, United States...	2024-04-25 21:00
15	Niel	Yuryatin	niel.yuryatin@mail.ru	(615) 770-5635	11203 Wentworth Lane, Nashville, Tennessee, Unite...	2024-04-25 21:00
16	Spike	Sill	spike.sill@hotmail.com	(914) 513-6574	3253 Cedar Ridge Place, Mount Vernon, New York...	2024-04-25 22:00
17	Billye	Lyle	billye.lyle@gmail.com	(727) 018-6475	14303 Morton Lane, Tampa, Florida, United States, 3...	2024-04-25 22:00

ii. view v_deposit_transaction menampilkan semua transaksi deposit.

- Query:

```
CREATE VIEW v_deposit_transaction AS
```

```
SELECT t.*
```

```
FROM transactions t
```

```
JOIN transaction_types tt ON t.transaction_type_id = tt.transaction_type_id
```

```
WHERE tt.name = 'deposit';
```

- Screenshoot:

```
CREATE VIEW v_deposit_transaction AS
SELECT t.*
FROM transactions t
JOIN transaction_types tt ON t.transaction_type_id = tt.transaction_type_id
WHERE tt.name = 'deposit';
```

100 %

Messages

Commands completed successfully.

Completion time: 2025-05-05T19:42:07.5291894+07:00

```
CREATE VIEW v_deposit_transaction AS
SELECT t.*
FROM transactions t
JOIN transaction_types tt ON t.transaction_type_id = tt.transaction_type_id
WHERE tt.name = 'deposit';

SELECT * FROM v_deposit_transaction;
```

100 %

Results Messages

	transaction_id	account_id	transaction_type_id	amount	transaction_date	description
1	027c8c04-d92d-46cd-8256-d46f395f3e0c	d29c5b3d-6bb3-4248-bf1a-4339bc80b6b0	1	112.34	2024-07-18 13:04:35.000	Ficta pueriliter tum ne efficit quidem quod vult N
2	049519be-3725-44ee-bf7e-f71ea192625e	f9341b55-2686-40af-9e1b-2988672efdf92	1	89.76	2025-02-06 03:42:17.000	Beateque vivendo a Platone disputata sunt haec
3	063e014a-839b-4ed2-b3a3-510e528f961c	0937445f-d5eb-4ef9-887f-4173fe662dd4	1	122.10	2025-03-05 00:22:17.000	Et quidem locis pluribus
4	06ae34b6-1723-4b44-baf9-a885f489f723	71cd07ab-b701-45f0-9c94-802383b3cc36	1	87.25	2025-01-09 09:05:38.000	Quales eius maiores fuissent et in conspectum su
5	0db669d2-610c-44cd-b5fa-2e3f58051d09	c098f0dd-6434-4f69-afdd-d756849fe1fd	1	124.05	2024-08-28 00:48:45.000	Praeterea neque praesenti nec
6	1ddf4572-0fe2-4535-9314-e968921dd07d	73b13073-025d-45c9-bed2-6b6760e7e10d	1	79.39	2024-07-06 17:41:05.000	Solemus quanto id in hominum consuetudine faci
7	241b055f-5955-4fb1-9ed8-ce96880e941a	8d7d7e4b-11a9-47e3-bca0-8f3aa0bada73	1	103.46	2024-11-03 08:57:00.000	Quae quasi saxum Tantalus semper impendit tum
8	2a9f2378-3ac8-4eb3-b801-5656cd2bf91f	36f3d280-2886-4e51-adcd-dfc644e59d80	1	119.26	2024-12-08 18:06:48.000	Loco videtur quibusdam stabilitas amicitiae vacill
9	2b3b1663-f993-4e82-9dbe-7a7779e4648d	fe716f26-3b0e-4fe5-bc40-4663f4fa06c0	1	124.22	2024-12-29 22:49:39.000	Intemperantes et ignavi numquam in sententia pe
10	3322a905-6f9a-4460-8c68-d8ce45feffaa	748ace76-6b8a-4fd4-9de1-b615ace22189	1	102.26	2024-09-21 08:52:41.000	Everti si ita melius sit migrare de vita His rebu
11	415591cc-b2b2-412a-8798-20b0269bfb20	d6a1328a-055b-40f3-9c71-da27fec396d2	1	122.17	2024-06-19 14:28:05.000	Contemnit qua qui utuntur benivolentiam sibi con
12	423a25c8-aeb3-4823-95be-99f6a213d9bc	418fedb1-da8f-4c67-8073-4a147e2f5ded	1	111.13	2024-05-23 13:36:37.000	Dicant foedus esse quoddam sapientium ut ne m
13	4c67ca98-65ab-486d-a48a-1dadd2bc365b	96da7988-0695-4780-a7c3-6c935dacc059	1	121.47	2025-01-03 07:55:40.000	Se nobis duces praebent ad voluptatem
14	4f6655d6-789d-477f-b61b-63acb94a1604	c8a710b1-6302-4189-8149-da76be7dfdc1	1	79.94	2024-09-20 22:52:04.000	Sit numeranda nec in discordia dominorum domu
15	6cf419fa-5d63-418a-83b7-346df8331ca6	80c28cdf-f2fb-4232-bbd5-39404d8199c2	1	110.56	2024-07-23 22:00:22.000	Quamquam autem et praeterita grate meminit et
16	82aeaeef-d879-49bf-8e37-8f41702623f5	1d97bce1-5c94-49e4-8e2a-6ad56b99afb0	1	88.98	2025-02-04 05:18:22.000	Sibi quibus non solum praesentibus fruuntur sed
17	87d2da1-f363-47d2-a2f6-f30b097e8c39	39e495d4-8be7-45fa-aab6-1ee6312cdd04	1	102.76	2024-10-18 05:39:14.000	Vacillare tumentur tamen eum locum seque facile u

Query executed successfully.

DESKTOP-DV919G1\INSTANCE202... DESKTOP-DV919G1\Lenovo... bank 00:00:00 33 rows

iii. view v_transfer_transaction menampilkan semua transaksi transfer.

- Query:

```
CREATE VIEW v_transfer_transaction AS
```

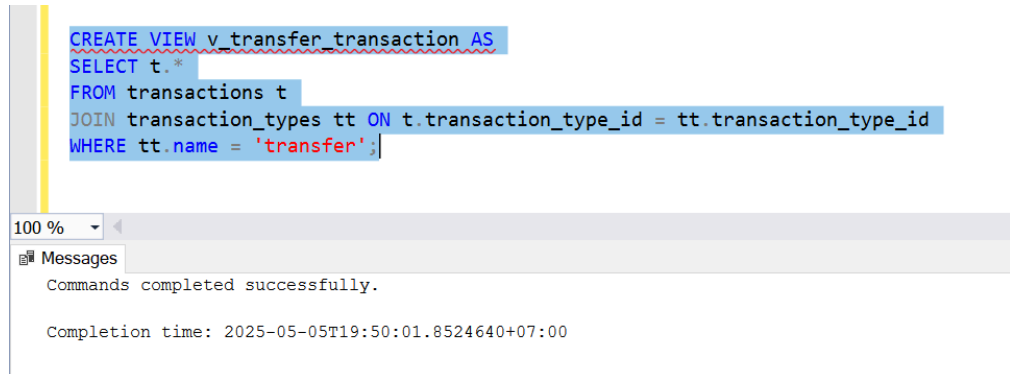
```
SELECT t.*
```

```
FROM transactions t
```

```
JOIN transaction_types tt ON t.transaction_type_id = tt.transaction_type_id
```

```
WHERE tt.name = 'transfer';
```

- Screenshot:



The screenshot shows the SQL Developer interface with the query results displayed in the Results pane. The query is the same as in the previous screenshot. The Results pane shows 34 rows of data.

transaction_id	account_id	transaction_type_id	amount	transaction_date	description
0096cba5-4e9c-49f4-b1df-4955a76275e4	802b2efe-e1d1-465b-940f-5cf573a2c985	2	80.72	2024-10-17 00:06:59.000	Potest fieri quanta ad augendas cum conscientia
01e6c965-00a0-41c8-8fc6-320a25e171e2	f75c87e7-70a8-4fbd-8ad6-9d5e90cfc314	2	112.54	2025-01-21 12:01:19.000	Integris testibus si infantes pueri mutae etiam be
0e5cfd7d-0803-476b-8405-23e0b5091c08	d094e634-9744-478d-b73b-1a73149b198b	2	98.25	2024-06-29 15:41:58.000	Fidem sensibus confirmat id est in eo quod seme
13706eb5-aabb-467b-86ca-b1c9999dc7dc	57620a31-a1ee-4dbc-9a72-09bc5bb72b7d	2	96.05	2024-11-23 23:08:47.000	Non offendit nam et laetatur amicorum laetitia
189574d3-bf80-449b-a8e6-e0ef42d0a096	3f494e04-a406-4692-a584-19db622e48ac	2	123.90	2025-03-13 07:48:13.000	Id ne ferae quidem faciunt ut ita dicam et ad cor
1bc0bec8-97de-4720-8278-a18d7538c308	a448f319-9dc4-4c02-b016-e1eab2b49629	2	91.54	2024-08-16 04:51:30.000	Bonorum quod omnium philosophorum sententia
2ae8fb1c-1844-4602-aa0a-5a13a6507874	ac35eddd-0fb1-4711-9bb8-1985fc566b52	2	79.15	2024-06-24 10:22:24.000	Nisi te quoque modo loqueretur intellegere
34608f20-08ad-42b2-8ac9-6a450b4788b9	c73f146f-aef6-415f-bc17-8bf06ba9819e	2	86.91	2024-11-15 04:57:54.000	Nisi nescio quam illam umbram quod appellant h
3f30d441-419d-4b4c-ae6a-8528cba6862c	5d8f91d2-881d-46c9-9d1f-19d33516897f	2	112.03	2025-01-17 11:08:16.000	Doloribus quanti in hominem maximi cadere poss
488f3a0c-a01c-4e6d-a46a-c9d4b04620f0	441aa9d2-bdf2-4b65-a79f-c18e66de0e17	2	116.77	2024-06-19 00:28:51.000	Latinam linguam non modo quid nobis probaretur
50c0a6f3-faba-4031-bb3b-e30a1bab1c5c	da3b43bc-55d1-4f0b-80d1-494ccfc9acc5	2	102.44	2025-03-22 10:19:47.000	Cum ita esset affecta secundum non recte si vol
54efc385-e6b7-4ce4-9be8-f2cc29398d38	bff8f8bd-3931-4f3f-b0c1-636597f97db5	2	118.34	2025-01-22 11:55:29.000	Iustitiam quidem recte quis dixerit per se ipsa al
583ebd92-6330-47e2-9115-c590051238c9	92ffabae-dab4-4737-8b26-ae60ed588cea	2	81.82	2025-03-08 05:03:38.000	Obnuamus et secunda iucunde
5b01a515-b320-4411-bc4d-03057bc38c7d	17a9ed0a-5ed3-41d6-9e20-df434296c83d	2	79.90	2025-03-10 08:51:11.000	Postea variari voluptas distinguere possit augeri
5ca3ef09-7b18-4782-a38a-9a621f898b19	65b4514d-4bbb-4aed-b0e0-859e1bef135e	2	118.80	2024-05-20 17:39:54.000	— Filium morte multavit
6d77ba74-b395-42c0-8e1a-0678b0c4ca127	a9eb22fe-d2a1-4f58-b903-ba06bfa692c4	2	79.35	2024-10-30 13:18:45.000	Magna aliqua Ut enim ad minima veniam quis no
730f46e7-0a12-4bae-a34d-2c1893ece2ce	b4afaa6-c52c-4b4e-b7f8-543eeb1ec49c	2	109.34	2024-10-20 04:34:34.000	Quis dixerit per se laetitiam id est

Query executed successfully. DESKTOP-DV919G1\INSTANCE202... DESKTOP-DV919G1\Lenovo... bank | 00:00:00 | 34 rows

- **Procedures**

i. Procedure sp_CreateCustomer untuk menambahkan customer baru ke dalam tabel customers: input first_name, last_name, email, phone_number, address.

- Query:

```
CREATE PROCEDURE sp_CreateCustomer
    @first_name VARCHAR(50),
    @last_name VARCHAR(50),
    @email VARCHAR(50),
    @phone_number VARCHAR(20),
    @address VARCHAR(255)
```

AS

BEGIN

```
    INSERT INTO customers (customer_id, first_name, last_name, email,
phone_number, address, created_at)
```

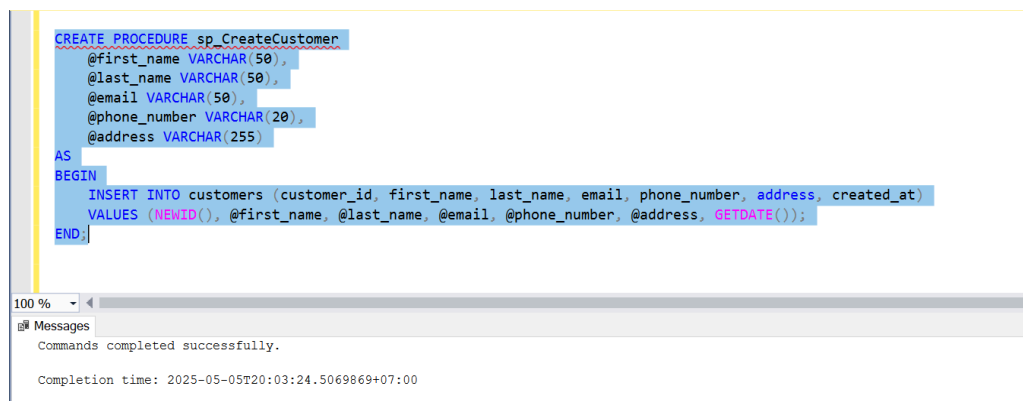
```
    VALUES (NEWID(), @first_name, @last_name, @email, @phone_number,
@address, GETDATE());
```

END;

```
EXEC sp_CreateCustomer @first_name='Alisha', @last_name='Rahman',
@email='alisha@example.com', @phone_number='081234567890',
@address='Jl. Mawar No. 10, Semarang';
```

```
SELECT * FROM customers
WHERE first_name = 'Alisha';
```

- Screenshot:



The screenshot displays a SQL query window with the following code:

```
CREATE PROCEDURE sp_CreateCustomer
    @first_name VARCHAR(50),
    @last_name VARCHAR(50),
    @email VARCHAR(50),
    @phone_number VARCHAR(20),
    @address VARCHAR(255)
AS
BEGIN
    INSERT INTO customers (customer_id, first_name, last_name, email, phone_number, address, created_at)
    VALUES (NEWID(), @first_name, @last_name, @email, @phone_number, @address, GETDATE());
END;
```

Below the query window, a 'Messages' pane shows the following output:

```
Commands completed successfully.
Completion time: 2025-05-05T20:03:24.5069869+07:00
```

```

CREATE PROCEDURE sp_CreateCustomer
    @first_name VARCHAR(50),
    @last_name VARCHAR(50),
    @email VARCHAR(50),
    @phone_number VARCHAR(20),
    @address VARCHAR(255)
AS
BEGIN
    INSERT INTO customers (customer_id, first_name, last_name, email, phone_number, address, created_at)
    VALUES (NEWID(), @first_name, @last_name, @email, @phone_number, @address, GETDATE());
END;

EXEC sp_CreateCustomer @first_name='Alisha', @last_name='Rahman',
    @email='alisha@example.com', @phone_number='081234567890', @address='Jl. Mawar No. 10, Semarang';

```

100 %

Messages

(1 row affected)

Completion time: 2025-05-05T20:06:20.3057671+07:00

100 %

Results Messages

	customer_id	first_name	last_name	email	phone_number	address	created_at
1	EE96E9D9-3815-45D9-ABBF-E61175D5C974	Alisha	Rahman	alisha@example.com	081234567890	Jl. Mawar No. 10, Semarang	2025-05-05 20:06:20.277

ii. Procedure sp_CreateAccount untuk membuat akun baru untuk customer yang sudah ada: input customer_id, account_number, account_type, balance. Notes: Tambahkan validasi untuk memastikan bahwa customer_id benar benar ada pada table customers.

- Query:

```

CREATE PROCEDURE sp_CreateAccount
    @customer_id CHAR(36),
    @account_number VARCHAR(20),
    @account_type VARCHAR(20),
    @balance DECIMAL(18, 2)
AS
BEGIN
    IF EXISTS (SELECT 1 FROM customers WHERE customer_id =
    @customer_id)
    BEGIN
        INSERT INTO accounts (account_id, customer_id, account_number,
account_type, balance, created_at)
        VALUES (NEWID(), @customer_id, @account_number, @account_type,
@balance, GETDATE());
    END
    ELSE
    BEGIN
        PRINT 'Customer ID tidak ditemukan';
    END
END;

```

EXEC sp_CreateAccount

```
@customer_id = '123e4567-e89b-12d3-a456-426614174000',  
@account_number = '9876543210',  
@account_type = 'Savings',  
@balance = 5000000;
```

EXEC sp_CreateAccount

```
@customer_id = '9d78736f-df51-4622-9cb1-c4db88dca2d0',  
@account_number = '2075461919',  
@account_type = 'current',  
@balance = 10838.30;
```

SELECT * FROM accounts

where customer_id = '9d78736f-df51-4622-9cb1-c4db88dca2d0';

- Screenshot:

```
CREATE PROCEDURE sp_CreateAccount  
    @customer_id CHAR(36),  
    @account_number VARCHAR(20),  
    @account_type VARCHAR(20),  
    @balance DECIMAL(18, 2)  
AS  
BEGIN  
    IF EXISTS (SELECT 1 FROM customers WHERE customer_id = @customer_id)  
    BEGIN  
        INSERT INTO accounts (account_id, customer_id, account_number, account_type, balance, created_at)  
        VALUES (NEWID(), @customer_id, @account_number, @account_type, @balance, GETDATE());  
    END  
    ELSE  
    BEGIN  
        PRINT 'Customer ID tidak ditemukan';  
    END  
END;
```

100 %

Messages

Commands completed successfully.

Completion time: 2025-05-05T20:15:23.3465339+07:00

```
EXEC sp_CreateAccount  
    @customer_id = '123e4567-e89b-12d3-a456-426614174000',  
    @account_number = '9876543210',  
    @account_type = 'Savings',  
    @balance = 5000000;
```

100 %

Messages

Customer ID tidak ditemukan

Completion time: 2025-05-05T20:17:27.3835853+07:00

```
EXEC sp_CreateAccount
@customer_id = '9d78736f-df51-4622-9cb1-c4db88dca2d0',
@account_number = '2075461919',
@account_type = 'current',
@balance = 10838.30;
```

100 %

Messages

```
(1 row affected)

Completion time: 2025-05-05T20:28:52.9481207+07:00
```

```
SELECT * FROM accounts
where customer_id = '9d78736f-df51-4622-9cb1-c4db88dca2d0';
```

100 %

Results Messages

	account_id	customer_id	account_number	account_type	balance	created_at
1	C3421FAA-2BB6-4BE5-875A-2234221C42B0	9d78736f-df51-4622-9cb1-c4db88dca2d0	2075461919	current	10838.30	2025-05-05 20:28:52.923
2	d29c5b3d-6bb3-4248-bf1a-4339bc80b6b0	9d78736f-df51-4622-9cb1-c4db88dca2d0	2075461919	current	10838.30	2024-04-25 23:51:31.000

iii. Procedure `sp_MakeTransaction` untuk menambahkan transaksi baru: input `account_id`, `transaction_type_id`, `amount`, `description`, `reference_account` (opsional). Notes: Tambahkan validasi untuk transfer, jika jumlah transfer melebihi balance maka transaksi dihentikan.

- Query:

```
CREATE PROCEDURE sp_MakeTransaction
```

```
@account_id CHAR(36),
```

```
@transaction_type_id INT,
```

```
@amount DECIMAL(18,2),
```

```
@description VARCHAR(255),
```

```
@reference_account CHAR(36) = NULL
```

```
AS
```

```
BEGIN
```

```
DECLARE @current_balance DECIMAL(18,2);
```

```
SELECT @current_balance = balance FROM accounts WHERE account_id
= @account_id;
```

```
IF @transaction_type_id = 2 AND @amount > @current_balance
RETURN;
```

```
INSERT INTO transactions (transaction_id, account_id, transaction_type_id,
amount, description, reference_account)
```

```
VALUES (NEWID(), @account_id, @transaction_type_id, @amount,
@description, @reference_account);
```



```

    IF @transaction_type_id != 1
        UPDATE accounts SET balance = balance - @amount WHERE account_id
        = @account_id;
END;

```

```

DECLARE @account_id CHAR(36) =
'07a36a4b-7943-4634-b17a-7c7eb4407cd3';
DECLARE @transaction_type_id INT = 3;
DECLARE @amount DECIMAL(18,2) = 100;
DECLARE @description VARCHAR(255) = 'Transfer ke teman';
DECLARE @reference_account CHAR(36) =
'72923966-A27D-4221-B929-B2B1CD7AA139';
EXEC sp_MakeTransaction
    @account_id,
    @transaction_type_id,
    @amount,
    @description,
    @reference_account;

```

```

SELECT * FROM transactions
WHERE account_id = '07a36a4b-7943-4634-b17a-7c7eb4407cd3';

```

- Screenshot:

```

CREATE PROCEDURE sp_MakeTransaction
    @account_id CHAR(36),
    @transaction_type_id INT,
    @amount DECIMAL(18,2),
    @description VARCHAR(255),
    @reference_account CHAR(36) = NULL
AS
BEGIN
    DECLARE @current_balance DECIMAL(18,2);
    SELECT @current_balance = balance FROM accounts WHERE account_id = @account_id;

    IF @transaction_type_id = 2 AND @amount > @current_balance
        RETURN;

    INSERT INTO transactions (transaction_id, account_id, transaction_type_id, amount, description, reference_account)
    VALUES (NEWID(), @account_id, @transaction_type_id, @amount, @description, @reference_account);

    IF @transaction_type_id != 1
        UPDATE accounts SET balance = balance - @amount WHERE account_id = @account_id;
END;

```

100 %

Messages

Commands completed successfully.

Completion time: 2025-05-05T20:55:44.2189835+07:00

```

DECLARE @account_id CHAR(36) = '07a36a4b-7943-4634-b17a-7c7eb4407cd3';
DECLARE @transaction_type_id INT = 3;
DECLARE @amount DECIMAL(18,2) = 100;
DECLARE @description VARCHAR(255) = 'Transfer ke teman';
DECLARE @reference_account CHAR(36) = '72923966-A27D-4221-B929-B2B1CD7AA139';
EXEC sp_MakeTransaction
    @account_id,
    @transaction_type_id,
    @amount,
    @description,
    @reference_account;

```

100 %

Messages

(1 row affected)

(1 row affected)

Completion time: 2025-05-05T21:16:20.8185802+07:00

```

DECLARE @account_id CHAR(36) = '07a36a4b-7943-4634-b17a-7c7eb4407cd3';
DECLARE @transaction_type_id INT = 3;
DECLARE @amount DECIMAL(18,2) = 100;
DECLARE @description VARCHAR(255) = 'Transfer ke teman';
DECLARE @reference_account CHAR(36) = '72923966-A27D-4221-B929-B2B1CD7AA139';
EXEC sp_MakeTransaction
    @account_id,
    @transaction_type_id,
    @amount,
    @description,
    @reference_account;

SELECT * FROM transactions
WHERE account_id = '07a36a4b-7943-4634-b17a-7c7eb4407cd3';

```

100 %

Results Messages

	transaction_id	account_id	transaction_type_id	amount	transaction_date	description
1	d14db5e5-0987-48df-b954-6ba77c7bd7fe	07a36a4b-7943-4634-b17a-7c7eb4407cd3	1	79.10	2024-08-11 19:46:41.000	Quae dicat ille bene noris Nisi mihi Phaedrum inq
2	ECE3DD5A-61D7-4C20-9754-1343AF06C208	07a36a4b-7943-4634-b17a-7c7eb4407cd3	3	100.00	2025-05-05 21:16:20.800	Transfer ke teman

iv. Procedure `sp_GetCustomerSummary` untuk menampilkan ringkasan data customer berdasarkan `customer_id`:

1. Nama lengkap customer
2. Jumlah akun yang dimiliki
3. Jumlah total saldo semua akun
4. Jumlah pinjaman aktif
5. Total pinjaman amount aktif

- Query:

```
CREATE PROCEDURE sp_GetCustomerSummary
```

```
    @customer_id CHAR(36)
```

```
AS
```

```
BEGIN
```

```
    SELECT
```

```
        CONCAT(first_name, ' ', last_name) AS full_name,
```

```
        (SELECT COUNT(*) FROM accounts WHERE customer_id =
```

```
        @customer_id) AS total_accounts,
```

```
        (SELECT SUM(balance) FROM accounts WHERE customer_id =
```

```
        @customer_id) AS total_balance,
```

```
        (SELECT COUNT(*) FROM loans WHERE customer_id = @customer_id
```

```
        AND status = 'Active') AS active_loans,
```

```

        (SELECT SUM(loan_amount) FROM loans WHERE customer_id =
@customer_id AND status = 'Active') AS total_loan_amount
    FROM customers
    WHERE customer_id = @customer_id;
END;

```

```
EXEC sp_GetCustomerSummary '9d78736f-df51-4622-9cb1-c4db88dca2d0';
```

- Screenshot:

The screenshot displays the SQL Server Enterprise Manager interface. The top pane shows the creation of a stored procedure named `sp_GetCustomerSummary` with a parameter `@customer_id CHAR(36)`. The procedure's logic is as follows:

```

CREATE PROCEDURE sp_GetCustomerSummary
    @customer_id CHAR(36)
AS
BEGIN
    SELECT
        CONCAT(first_name, ' ', last_name) AS full_name,
        (SELECT COUNT(*) FROM accounts WHERE customer_id = @customer_id) AS total_accounts,
        (SELECT SUM(balance) FROM accounts WHERE customer_id = @customer_id) AS total_balance,
        (SELECT COUNT(*) FROM loans WHERE customer_id = @customer_id AND status = 'Active') AS active_loans,
        (SELECT SUM(loan_amount) FROM loans WHERE customer_id = @customer_id AND status = 'Active') AS total_loan_amount
    FROM customers
    WHERE customer_id = @customer_id;
END;

```

The bottom pane shows the execution of the stored procedure with the customer ID `'9d78736f-df51-4622-9cb1-c4db88dca2d0'`. The Messages tab indicates that the commands completed successfully. The Results tab shows the following output:

	full_name	total_accounts	total_balance	active_loans	total_loan_amount
1	Sven Crowley	2	21676.60	0	NULL