Revisi Praktikum 2 Sistem Basis Data 2024

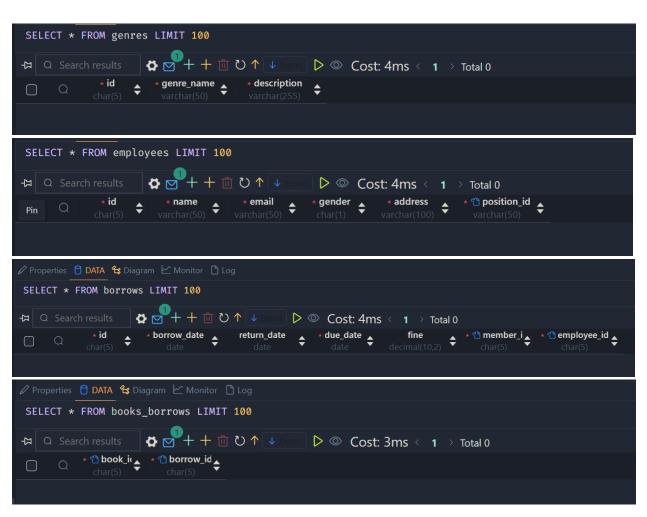NRP / Nama : 5025241134 / Gilbran Mahdavikia Raja
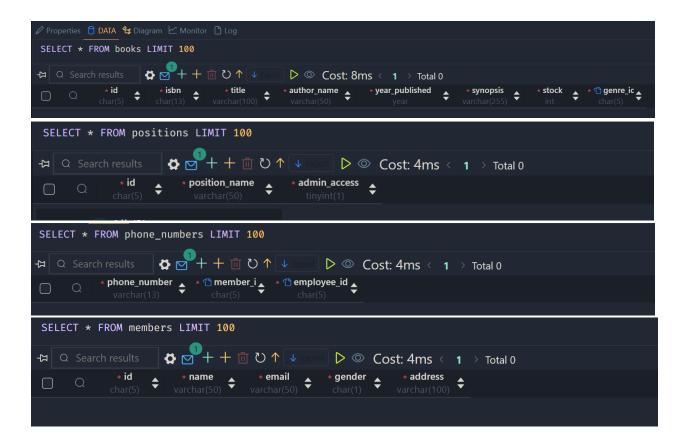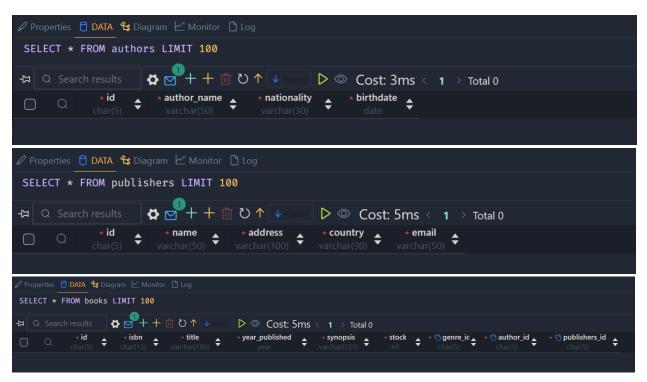
Kelas   : SBD C

RDBMS   :

Link SQL   :

Kode Asdos   : SBDC03

Sesi   : Revisi

1.

```
SELECT * FROM genres LIMIT 100
```

Search results — Cost: 4ms < 1 > Total 0

* id char(5)	* genre_name varchar(50)	* description varchar(255)

```
SELECT * FROM employees LIMIT 100
```

Search results — Cost: 4ms < 1 > Total 0

* id char(5)	* name varchar(50)	* email varchar(50)	* gender char(1)	* address varchar(100)	* position_id varchar(50)

Properties DATA Diagram Monitor Log

```
SELECT * FROM borrows LIMIT 100
```

Search results — Cost: 4ms < 1 > Total 0

* id char(5)	* borrow_date date	return_date date	* due_date date	fine decimal(10,2)	* member_i char(5)	* employee_id char(5)

Properties DATA Diagram Monitor Log

```
SELECT * FROM books_borrows LIMIT 100
```

Search results — Cost: 3ms < 1 > Total 0

* book_i char(5)	* borrow_id char(5)

3.

Properties DATA Diagram Monitor Log

`SELECT * FROM members LIMIT 100`

Search results Cost: 6ms ‹ 1 › Total 0

		* name varchar(50)	* email varchar(50)	* gender char(1)	* address varchar(100)	* NIK varchar(20)

Columns: All (5)

Properties DATA Diagram Monitor Log

`SELECT * FROM borrows LIMIT 100`

Search results Cost: 6ms ‹ 1 › Total 0

		* id char(5)	* borrow_date date	return_date date	* due_date date	fine decimal(10,2)	* employee_id char(5)	member_NIK varchar(20)

Properties DATA Diagram Monitor Log

`SELECT * FROM phone_numbers LIMIT 100`

Search results Cost: 3ms ‹ 1 › Total 0

		* phone_number varchar(13)	* employee_id char(5)	member_NIK varchar(20)

4.

∨ ☰ Tables (9)

> 🔲 authors
> 🔲 books
> 🔲 books_borrows
> 🔲 borrows
> 🔲 employees
> 🔲 genres
> 🔲 members
> 🔲 positions
> 🔲 publishers

Properties DATA Diagram Monitor Log

`SELECT * FROM members LIMIT 100`

Search results Cost: 6ms ‹ 1 › Total 0

		* name varchar(50)	* email varchar(50)	* gender char(1)	* address varchar(100)	* NIK varchar(20)	* phone_number varchar(13)

5.

Properties **DATA** **Diagram** **Monitor** **Log**

`SELECT * FROM members LIMIT 100`

Search results   Cost: 5ms < 1 > Total 5

Pin		* NIK varchar(20)	* name varchar(50)	* email varchar(50)	* gender char(1)	* address varchar(100)	* phone_number varchar(13)
		Filter	Filter	Filter	Filter	Filter	Filter
	> 1	3305040901072053	Teddy Widodo	teddy@gmail.com	L	Jl. Anggrek No.17	085782306818
	> 2	3326161509700004	Beni Soeharti	beni@gmail.com	L	Jl. Raya No.56	0812345678919
	> 3	3326162409040002	Citra Kirana	citra@gmail.com	P	Jl. Cinta No.45	088374628921
	> 4	3525017006520020	Nico Parto	nico@gmail.com	L	Jl. Kenanga No.33	089675329117
	> 5	3525017006950028	Jasmine Neroli	jasmine@gmail.com	P	Jl. Melati No.9	083285716164

Properties **DATA** **Diagram** **Monitor** **Log**

`SELECT * FROM genres LIMIT 100`

Search results   Cost: 5ms < 1 > Total 5

Pin		* id char(5)	* genre_name varchar(50)	* description varchar(255)
		Filter	Filter	Filter
	> 1	GR001	History	Books that examine specif
	> 2	GR002	Fiction	Imaginative stories create
	> 3	GR003	Self-Development	Books that provide guidar
	> 4	GR004	Biography	Tells a persons life in deta
	> 5	GR005	Reference	Books that function as cor

Properties **DATA** **Diagram** **Monitor** **Log**

`SELECT * FROM employees LIMIT 100`

Search results   Cost: 6ms < 1 > Total 5

		* id char(5)	* name varchar(50)	* email varchar(50)	* gender char(1)	* phone_number varchar(13)	* address varchar(100)	* position_id varchar(50)
		Filter	Filter	Filter	Filter	Filter	Filter	Filter
	> 1	EM001	Andi Gading	andi@gmail.com	P	081628492610	Jl. Merdeka No.10	PS001
	> 2	EM002	Budi Sitombing	budi@gmail.com	L	085864927581	Jl. Sukun Raya No.25	PS003
	> 3	EM003	Jenni Fertina	tina@gmail.com	P	089603471812	Jl. Pahlawan No.5	PS001
	> 4	EM004	Lili Sari	lili@gmail.com	L	088273659814	Jl. Cendana No.8	PS002
	> 5	EM005	Alexander Agus	agus@gmail.com	L	088273659814	Jl. Bunga No.12	PS001

```
SELECT * FROM borrows LIMIT 100
```

Search results ⚙ ✉1 + + 🗑 ↻ ↑ ↓ Export ▷ 👁 Cost: 6ms ‹ 1 › Total 5

		* id char(5)	* borrow_date date	return_date date	* due_date date	fine decimal(10,2)	🗋 member_NIK varchar(20)	* 🗋 employee_id char(5)
		Filter	Filter	Filter	Filter	Filter	Filter	Filter
	›1	BR001	2024-05-06	2024-05-06	2024-05-20	(NULL)	3326162409040002	EM004
	›2	BR002	2024-07-14	2024-07-29	2024-07-28	5000.00	3525017006950028	EM001
	›3	BR003	2024-09-22	2024-10-08	2024-10-06	10000.00	3525017006520020	EM003
	›4	BR004	2024-10-03	2024-10-20	2024-10-17	15000.00	3305040901072053	EM002
	›5	BR005	2024-11-02	(NULL)	2024-11-16	(NULL)	3326161509700004	EM005

```
SELECT * FROM books_borrows LIMIT 100
```

Search results ⚙ ✉1 + + 🗑 ↻ ↑ ↓ Export ▷ 👁 Cost: 5ms ‹ 1 › Total 6

		* 🗋 book_i char(5)	* 🗋 borrow_id char(5)
		Filter	Filter
	›1	BK001	BR001
	›2	BK001	BR002
	›3	BK003	BR002
	›4	BK004	BR003
	›5	BK005	BR004
	›6	BK002	BR005

```
SELECT * FROM books LIMIT 100
```

Search results ⚙ ✉1 + + 🗑 ↻ ↑ ↓ ▷ 👁 Cost: 7ms ‹ 1 › Total 5

Pin		* id char(5)	* isbn char(13)	* title varchar(100)	* year_published year	* synopsis varchar(255)	* stock int	🗋 genre_ic char(5)	🗋 author_id char(5)	🗋 publishers_id char(5)
		Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
	›1	BK001	978012345678	Jejak Peradaban: Kisah Per	2010	Delving into Indonesian h	5	GR001	AU002	PB003
	›2	BK002	978123456789	Small Steps, Big Changes:	2005	Discover the power of sm	3	GR003	AU003	PB002
	›3	BK003	978234567890	Complete Dictionary of In	2020	A complete guide to infor	7	GR005	AU001	PB001
	›4	BK004	978345678901	Breaking Barriers: The Ins	2018	The extraordinary story of	2	GR004	AU005	PB001
	›5	BK005	978456789012	Light at the End of the Ro	2024	In a journey full of challen	4	GR002	AU004	PB004

```
SELECT * FROM authors LIMIT 100
```

Search results ⚙ ✉1 + + 🗑 ↻ ↑ ↓ Export ▷ 👁 Cost: 4ms ‹ 1 › Total 5

		* id char(5)	* author_name varchar(50)	* nationality varchar(30)	* birthdate date
		Filter	Filter	Filter	Filter
	›1	AU001	Michael Brown	American	1990-03-30
	›2	AU002	Andi Saputra	Indonesian	1988-10-02
	›3	AU003	Yuki Nakamura	Japanese	1973-01-22
	›4	AU004	Kim Min Joon	South Korean	1982-04-18
	›5	AU005	James Williams	British	1962-12-04

Properties DATA Diagram Monitor Log

SELECT * FROM publishers LIMIT 100

Search results ⚙ ✉ ① + + 🗑 ↻ ↑ ⬇ Export ▷ 👁 Cost: 5ms ‹ 1 › Total 5

		* id char(5)	* name varchar(50)	* address varchar(100)	* country varchar(30)	* email varchar(50)
		Filter	Filter	Filter	Filter	Filter
	› 1	PB001	Silver Oak Publishing	1234 Elm Street	United States	silveroak1234@gmail.com
	› 2	PB002	Blue Sky Books	9012 Pine Road	Jepang	bluesky9012@gmail.com
	› 3	PB003	Green Leaf Press	5678 Maple Avenue	Indonesia	greenleaf5678@gmail.com
	› 4	PB004	Golden Dragon Publishing	3456 Bamboo Lane	China	goldendragon3456@gma
	› 5	PB005	Red River Press	7890 Cherry Blossom Driv	France	redriver7890@gmail.com

Properties DATA Diagram Monitor Log

SELECT * FROM positions LIMIT 100

Search results ⚙ ✉ ① + + 🗑 ↻ ↑ ⬇ Export ▷ 👁 Cost: 5ms ‹ 1 › Total 3

		* id char(5)	* position_name varchar(50)	* admin_access tinyint(1)
		Filter	Filter	Filter
	› 1	PS001	Librarian	1
	› 2	PS002	Cleaning	0
	› 3	PS003	Security	0

6.


```
SELECT * FROM books_borrows LIMIT 100
```

Cost: 4ms 1 Total 6

		book_id char(5)	borrow_id int
		Filter	Filter
	> 1	BK001	1
	> 2	BK001	2
	> 3	BK003	2
	> 4	BK004	3
	> 5	BK005	4
	> 6	BK002	5

```
SELECT * FROM books LIMIT 100
```

Cost: 6ms 1 Total 5

		id char(5)	isbn char(13)	title varchar(100)	year_published year	synopsis varchar(255)	stock int	genre_id char(5)	author_id char(5)	publishers_id char(5)
		Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
	> 1	BK001	978012345678S	Jejak Peradaban: Kisah Pel	2010	Delving into Indonesian h	5	GR001	AU002	PB003
	> 2	BK002	978123456789C	Small Steps, Big Changes:	2005	Discover the power of sm	3	GR003	AU003	PB002
	> 3	BK003	9782345678901	Complete Dictionary of In	2020	A complete guide to infor	7	GR005	AU001	PB001
	> 4	BK004	9783456789012	Breaking Barriers: The Insp	2018	The extraordinary story of	2	GR004	AU005	PB001
	> 5	BK005	9784567890123	Light at the End of the Ro	2024	In a journey full of challen	4	GR002	AU004	PB004

7.


```
SELECT * FROM borrows LIMIT 100
```

Cost: 4ms 1 Total 5

		id int	borrow_date date	return_date date	due_date date	fine decimal(10,2)	member_NIK varchar(20)	employee_id char(5)
		Filter	Filter	Filter	Filter	Filter	Filter	Filter
	> 1	1	2024-05-06	2024-05-06	2024-05-20	(NULL)	3326162409040002	EM004
	> 2	2	2024-07-14	2024-07-29	2024-07-28	5000.00	3525017006950028	EM001
	> 3	3	2024-09-22	2024-10-08	2024-10-06	10000.00	3525017006520020	EM003
	> 4	4	2024-10-03	2024-10-20	2024-10-17	15000.00	3305040901072053	EM002
	> 5	5	2024-11-02	2024-11-16	2024-11-16	(NULL)	3326161509700004	EM005

8.

```
SELECT * FROM borrows LIMIT 100
```

Cost: 2ms < 1 > Total 5

	id int	* borrow_date date	return_date date	* due_date date	fine decimal(10,2)	member_NIK varchar(20)	* employee_id char(5)
	Filter	Filter	Filter	Filter	Filter	Filter	Filter
> 1	1	2024-05-06	2024-05-06	2024-05-20	(NULL)	3326162409040002	EM004
> 2	2	2024-07-14	2024-07-29	2024-07-28	5000.00	3525017006950028	EM001
> 3	3	2024-09-22	2024-10-08	2024-10-06	(NULL)	3525017006520020	EM003
> 4	4	2024-10-03	2024-10-20	2024-10-17	(NULL)	3305040901072053	EM002
> 5	5	2024-11-02	2024-11-16	2024-11-16	(NULL)	3326161509700004	EM005

9.

Properties DATA Diagram Monitor Log

```
SELECT * FROM borrows LIMIT 100
```

Cost: 2ms < 1 > Total 6

	id int	* borrow_date date	return_date date	* due_date date	fine decimal(10,2)	member_NIK varchar(20)	* employee_id char(5)
	Filter	Filter	Filter	Filter	Filter	Filter	Filter
> 1	1	2024-05-06	2024-05-06	2024-05-20	(NULL)	3326162409040002	EM004
> 2	2	2024-07-14	2024-07-29	2024-07-28	5000.00	3525017006950028	EM001
> 3	3	2024-09-22	2024-10-08	2024-10-06	(NULL)	3525017006520020	EM003
> 4	4	2024-10-03	2024-10-20	2024-10-17	(NULL)	3305040901072053	EM002
> 5	5	2024-11-02	2024-11-16	2024-11-16	(NULL)	3326161509700004	EM005
> 6	6	2024-11-03	(NULL)	2024-11-17	(NULL)	3326161509700004	EM005

10.

Properties DATA Diagram Monitor Log

```
SELECT * FROM employees LIMIT 100
```

Cost: 4ms < 1 > Total 6

	id char(5)	* name varchar(50)	* email varchar(50)	* gender char(1)	* phone_number varchar(13)	* address varchar(100)	* position_id varchar(50)
	Filter	Filter	Filter	Filter	Filter	Filter	Filter
> 1	EM001	Andi Gading	andi@gmail.com	P	081628492610	Jl. Merdeka No.10	PS001
> 2	EM002	Budi Sitombing	budi@gmail.com	L	085864927581	Jl. Sukun Raya No.25	PS003
> 3	EM003	Jenni Fertina	tina@gmail.com	P	089603471812	Jl. Pahlawan No.5	PS001
> 4	EM004	Lili Sari	lili@gmail.com	L	088273659814	Jl. Cendana No.8	PS002
> 5	EM005	Alexander Agus	agus@gmail.com	L	088273659814	Jl. Bunga No.12	PS001
> 6	EM006	Aspas Gata	aspasgata@gmail.com	L	0895323390308	Jl. Badut No.62.	PS001

11.

Properties DATA Diagram Monitor Log

SELECT * FROM employees LIMIT 100

Search results   Cost: 2ms ‹ 1 › Total 6

		* id char(5)	* name varchar(50)	* email varchar(50)	* gender char(1)	* phone_number varchar(13)	* address varchar(100)	* position_id varchar(50)
		Filter	Filter	Filter	Filter	Filter	Filter	Filter
	>1	EM001	Andi Haki	andi@gmail.com	L	081628492611	Jl. Merdeka No.10	PS001
	>2	EM002	Budi Sitombing	budi@gmail.com	L	085864927581	Jl. Sukun Raya No.25	PS003
	>3	EM003	Jenni Fertina	tina@gmail.com	P	089603471812	Jl. Pahlawan No.5	PS001
	>4	EM004	Lili Sari	lili@gmail.com	L	088273659814	Jl. Cendana No.8	PS002
	>5	EM005	Alexander Agus	agus@gmail.com	L	088273659814	Jl. Bunga No.12	PS001
	>6	EM006	Aspas Gata	aspasgata@gmail.com	L	0895323390308	Jl. Badut No.62.	PS001

12.

Properties DATA Diagram Monitor Log

SELECT * FROM employees LIMIT 100

Search results   Cost: 2ms ‹ 1 › Total 5

		* id char(5)	* name varchar(50)	* email varchar(50)	* gender char(1)	* phone_number varchar(13)	* address varchar(100)	* position_id varchar(50)
		Filter	Filter	Filter	Filter	Filter	Filter	Filter
	>1	EM001	Andi Haki	andi@gmail.com	L	081628492611	Jl. Merdeka No.10	PS001
	>2	EM002	Budi Sitombing	budi@gmail.com	L	085864927581	Jl. Sukun Raya No.25	PS003
	>3	EM003	Jenni Fertina	tina@gmail.com	P	089603471812	Jl. Pahlawan No.5	PS001
	>4	EM004	Lili Sari	lili@gmail.com	L	088273659814	Jl. Cendana No.8	PS002
	>5	EM005	Alexander Agus	agus@gmail.com	L	088273659814	Jl. Bunga No.12	PS001

Properties DATA Diagram Monitor Log

SELECT * FROM members LIMIT 100

Search results   Cost: 4ms ‹ 1 › Total 4

		* NIK varchar(20)	* name varchar(50)	* email varchar(50)	* gender char(1)	* address varchar(100)	* phone_number varchar(13)
		Filter	Filter	Filter	Filter	Filter	Filter
	>1	3305040901072053	Teddy Widodo	teddy@gmail.com	L	Jl. Anggrek No.17	085782306818
	>2	3326161509700004	Beni Soeharti	beni@gmail.com	L	Jl. Raya No.56	0812345678919
	>3	3326162409040002	Citra Kirana	citra@gmail.com	P	Jl. Cinta No.45	088374628921
	>4	3525017006520020	Nico Parto	nico@gmail.com	L	Jl. Kenanga No.33	089675329117

Log SQL:
-- Active: 1731060400242@@127.0.0.1@3306@wendy_librarian
DROP DATABASE IF EXISTS wendy_librarian;

CREATE DATABASE IF NOT EXISTS wendy_librarian;

USE wendy_librarian;

```sql
CREATE TABLE members (
    id char(5) NOT NULL,
    name varchar(50) NOT NULL,
    email varchar(50) NOT NULL,
    gender char(1) NOT NULL,
    address varchar(100) NOT NULL,
    PRIMARY KEY (id)
);

CREATE TABLE genres (
    id char(5) NOT NULL,
    genre_name varchar(50) NOT NULL,
    description varchar(255) NOT NULL,
    PRIMARY KEY (id)
);

CREATE TABLE books (
    id char(5) NOT NULL,
    isbn char(13) NOT NULL,
    title varchar(100) NOT NULL,
    author_name varchar(50) NOT NULL,
    year_published YEAR NOT NULL,
    synopsis varchar(255) NOT NULL,
    stock int NOT NULL,
    genre_id char(5) NOT NULL,
    PRIMARY KEY (id),
    FOREIGN KEY (genre_id) REFERENCES genres (id) ON UPDATE CASCADE ON
DELETE CASCADE
);

CREATE TABLE positions (
    id char(5) NOT NULL,
    position_name varchar(50) NOT NULL,
    admin_access BOOLEAN NOT NULL,
    PRIMARY KEY (id)
);

CREATE TABLE employees (
    id char(5) NOT NULL,
```

```sql
    name varchar(50) NOT NULL,
    email varchar(50) NOT NULL,
    gender char(1) NOT NULL,
    address varchar(100) NOT NULL,
    position_id varchar(50) NOT NULL,
    PRIMARY KEY (id),
    FOREIGN KEY (position_id) REFERENCES positions (id) ON DELETE CASCADE
ON UPDATE CASCADE
);

CREATE TABLE phone_numbers (
    phone_number varchar(13) NOT NULL,
    member_id char(5) NOT NULL,
    employee_id char(5) NOT NULL,
    PRIMARY KEY (phone_number),
    CONSTRAINT fk_1 FOREIGN KEY (member_id) REFERENCES members (id) ON
DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (employee_id) REFERENCES employees (id) ON DELETE
CASCADE ON UPDATE CASCADE
);

CREATE TABLE borrows (
    id char(5) NOT NULL,
    borrow_date DATE NOT NULL,
    return_date DATE,
    due_date DATE NOT NULL,
    fine decimal(10, 2),
    member_id char(5) NOT NULL,
    employee_id char(5) NOT NULL,
    PRIMARY KEY (id),
    CONSTRAINT fk_2 FOREIGN KEY (member_id) REFERENCES members (id) ON
DELETE CASCADE ON UPDATE CASCADE,
    FOREIGN KEY (employee_id) REFERENCES employees (id) ON DELETE
CASCADE ON UPDATE CASCADE
);

CREATE TABLE books_borrows (
    book_id char(5) NOT NULL,
    borrow_id char(5) NOT NULL,
    PRIMARY KEY (book_id, borrow_id),
```

```sql
    FOREIGN KEY (book_id) REFERENCES books (id) ON DELETE CASCADE ON
UPDATE CASCADE,
    CONSTRAINT borrow_fk FOREIGN KEY (borrow_id) REFERENCES borrows (id)
ON DELETE CASCADE ON UPDATE CASCADE
);

--2
CREATE TABLE authors (
    id char(5) NOT NULL,
    author_name varchar(50) NOT NULL,
    nationality varchar(30) NOT NULL,
    birthdate DATE NOT NULL,
    PRIMARY KEY (id)
);

CREATE TABLE publishers (
    id char(5) NOT NULL,
    name varchar(50) NOT NULL,
    address varchar(100) NOT NULL,
    country varchar(30) NOT NULL,
    email varchar(50) NOT NULL,
    PRIMARY KEY (id)
);

ALTER TABLE books
DROP author_name,
ADD author_id char(5) NOT NULL,
ADD FOREIGN KEY (author_id) REFERENCES authors (id) ON DELETE CASCADE
ON UPDATE CASCADE,
ADD publishers_id char(5) NOT NULL,
ADD FOREIGN KEY (publishers_id) REFERENCES publishers (id) ON DELETE
CASCADE ON UPDATE CASCADE;

--3
ALTER TABLE borrows DROP CONSTRAINT fk_2;

ALTER TABLE phone_numbers DROP CONSTRAINT fk_1;

ALTER TABLE members
DROP PRIMARY KEY,
```

```sql
DROP COLUMN id,
ADD NIK varchar(20) NOT NULL,
ADD PRIMARY KEY (NIK);

ALTER TABLE phone_numbers
DROP member_id,
ADD member_NIK VARCHAR(20),
ADD FOREIGN KEY (member_NIK) REFERENCES members (NIK) ON UPDATE
CASCADE ON DELETE CASCADE;

ALTER TABLE borrows
DROP member_id,
ADD member_NIK varchar(20),
ADD FOREIGN KEY (member_NIK) REFERENCES members (NIK) ON UPDATE
CASCADE ON DELETE CASCADE;

--4
DROP TABLE phone_numbers;

ALTER TABLE members ADD phone_number varchar(13) NOT NULL;

ALTER TABLE employees ADD phone_number varchar(13) NOT NULL;

--5
INSERT INTO
    genres
VALUES (
        'GR001',
        'History',
        'Books that examine specific events or eras, providing insight into the past and its
impact on the present. Usually accompanied by in-depth historical data, analysis and
narrative.'
    ),
    (
        'GR002',
        'Fiction',
        'Imaginative stories created by writers, not based on real facts. This genre includes
subgenres such as romance, fantasy, and adventure, with a focus on characters and
storyline.'
    ),
```

```sql
    (
        'GR003',
        'Self-Development',
        'Books that provide guidance to improve the quality of life or skills of the reader.
Presents practical advice on topics such as motivation, time management, and personal
problem solving.'
    ),
    (
        'GR004',
        'Biography',
        'Tells a persons life in detail from birth to the end of his life or now. Compiled based
on facts, this story describes the characters experiences, struggles and achievements.'
    ),
    (
        'GR005',
        'Reference',
        'Books that function as complete reference sources, such as dictionaries,
encyclopedias, or handbooks. Contains data, definitions or concepts that can be
accessed as needed, without having to be read sequentially.'
    );

INSERT INTO
    authors
VALUES (
        'AU001',
        'Michael Brown',
        'American',
        '1990-03-30'
    ),
    (
        'AU002',
        'Andi Saputra',
        'Indonesian',
        '1988-10-02'
    ),
    (
        'AU003',
        'Yuki Nakamura',
        'Japanese',
        '1973-01-22'
```

```sql
    ),
    (
        'AU004',
        'Kim Min Joon',
        'South Korean ',
        '1982-04-18'
    ),
    (
        'AU005',
        'James Williams ',
        'British',
        '1962-12-04'
    );

INSERT INTO
    publishers
VALUES (
        'PB001',
        'Silver Oak Publishing',
        '1234 Elm Street',
        'United States',
        'silveroak1234@gmail.com'
    ),
    (
        'PB002',
        'Blue Sky Books',
        '9012 Pine Road',
        'Jepang',
        'bluesky9012@gmail.com'
    ),
    (
        'PB003',
        'Green Leaf Press',
        '5678 Maple Avenue',
        'Indonesia',
        'greenleaf5678@gmail.com'
    ),
    (
        'PB004',
        'Golden Dragon Publishing',
```

```
        '3456 Bamboo Lane',
        'China',
        'goldendragon3456@gmail.com'
    ),
    (
        'PB005',
        'Red River Press',
        '7890 Cherry Blossom Drive',
        'France',
        'redriver7890@gmail.com'
    );

INSERT INTO
    books
VALUES (
        'BK001',
        '9780123456789',
        'Jejak Peradaban: Kisah Perjalanan Sejarah Indonesia',
        '2010',
        'Delving into Indonesian history, this book presents important events and influential
figures who shaped the nations civilization, bringing readers to understand the roots of
Indonesian culture and identity.',
        5,
        'GR001',
        'AU002',
        'PB003'
    ),
    (
        'BK002',
        '9781234567890',
        'Small Steps, Big Changes: Building Positive Habits',
        '2005',
        'Discover the power of small habits that have a big impact. This book provides
practical strategies for building positive habits that can change lives and improve overall
well-being.',
        3,
        'GR003',
        'AU003',
        'PB002'
    ),
```

```
    (
        'BK003',
        '9782345678901',
        'Complete Dictionary of Information Technology Terms',
        '2020',
        'A complete guide to information technology terms, this book explains basic
concepts to complex technical terms, making it a useful reference resource for students
and professionals.',
        7,
        'GR005',
        'AU001',
        'PB001'
    ),
    (
        'BK004',
        '9783456789012',
        'Breaking Barriers: The Inspiring Story of Nelson Mandela',
        '2018',
        'The extraordinary story of Nelson Mandela, a freedom fighter who overcame
obstacles to fight for equality and justice. An inspiring journey of courage, sacrifice, and
hope.',
        2,
        'GR004',
        'AU005',
        'PB001'
    ),
    (
        'BK005',
        '9784567890123',
        'Light at the End of the Road: A Story of Hope',
        '2024',
        'In a journey full of challenges, a character finds the strength of hope and
friendship. This novel invites readers to reflect on the meaning of life and the
importance of believing in a better future.',
        4,
        'GR002',
        'AU004',
        'PB004'
    );
```

```sql
INSERT INTO
    positions
VALUES ('PS001', 'Librarian', TRUE),
    ('PS002', 'Cleaning', FALSE),
    ('PS003', 'Security', FALSE);

ALTER TABLE employees
MODIFY phone_number varchar(13) NOT NULL after gender;

INSERT INTO
    employees
VALUES (
        'EM001',
        'Andi Gading',
        'andi@gmail.com',
        'P',
        '081628492610',
        'Jl. Merdeka No.10',
        'PS001'
    ),
    (
        'EM002',
        'Budi Sitombing',
        'budi@gmail.com',
        'L',
        '085864927581',
        'Jl. Sukun Raya No.25',
        'PS003'
    ),
    (
        'EM003',
        'Jenni Fertina',
        'tina@gmail.com',
        'P',
        '089603471812',
        'Jl. Pahlawan No.5',
        'PS001'
    ),
    (
        'EM004',
```

```sql
        'Lili Sari',
        'lili@gmail.com',
        'L',
        '088273659814',
        'Jl. Cendana No.8',
        'PS002'
    ),
    (
        'EM005',
        'Alexander Agus',
        'agus@gmail.com',
        'L',
        '088273659814',
        'Jl. Bunga No.12',
        'PS001'
    );

ALTER TABLE members MODIFY NIK varchar(20) NOT NULL after name;

ALTER TABLE members MODIFY name varchar(50) NOT NULL after NIK;

INSERT INTO
    members
VALUES (
        '3326162409040002',
        'Citra Kirana',
        'citra@gmail.com',
        'P',
        'Jl. Cinta No.45',
        '088374628921'
    ),
    (
        '3525017006950028',
        'Jasmine Neroli',
        'jasmine@gmail.com',
        'P',
        'Jl. Melati No.9',
        '083285716164'
    ),
    (
```

```sql
        '3525017006520020',
        'Nico Parto',
        'nico@gmail.com',
        'L',
        'Jl. Kenanga No.33',
        '089675329117'
    ),
    (
        '3305040901072053',
        'Teddy Widodo',
        'teddy@gmail.com',
        'L',
        'Jl. Anggrek No.17',
        '085782306818'
    ),
    (
        '3326161509700004',
        'Beni Soeharti',
        'beni@gmail.com',
        'L',
        'Jl. Raya No.56',
        '0812345678919'
    );

ALTER TABLE borrows
MODIFY employee_id char(5) NOT NULL after member_NIK;

INSERT INTO
    borrows
VALUES (
        'BR001',
        '2024-05-06',
        '2024-05-06',
        '2024-05-20',
        NULL,
        '3326162409040002',
        'EM004'
    ),
    (
        'BR002',
```

```sql
            '2024-07-14',
            '2024-07-29',
            '2024-07-28',
            5000.00,
            '3525017006950028',
            'EM001'
        ),
        (
            'BR003',
            '2024-09-22',
            '2024-10-08',
            '2024-10-6',
            10000.00,
            '3525017006520020',
            'EM003'
        ),
        (
            'BR004',
            '2024-10-03',
            '2024-10-20',
            '2024-10-17',
            15000.00,
            '3305040901072053',
            'EM002'
        ),
        (
            'BR005',
            '2024-11-02',
            NULL,
            '2024-11-16',
            NULL,
            '3326161509700004',
            'EM005'
        );

INSERT INTO
    books_borrows
VALUES ('BK001', 'BR001'),
    ('BK003', 'BR002'),
    ('BK001', 'BR002'),
```

```
    ('BK004', 'BR003'),
    ('BK005', 'BR004'),
    ('BK002', 'BR005');

--6
DELETE FROM books_borrows WHERE 1 = 1;

ALTER TABLE books_borrows DROP CONSTRAINT borrow_fk;

DELETE FROM borrows WHERE 1 = 1;

ALTER TABLE borrows
DROP PRIMARY KEY,
MODIFY id int AUTO_INCREMENT,
ADD PRIMARY KEY (id);

ALTER TABLE books_borrows
MODIFY borrow_id int AUTO_INCREMENT NOT NULL,
ADD FOREIGN KEY (borrow_id) REFERENCES borrows (id) ON DELETE CASCADE
ON UPDATE CASCADE;

INSERT INTO
    borrows (
        borrow_date,
        return_date,
        due_date,
        fine,
        member_NIK,
        employee_id
    )
VALUES (
        '2024-05-06',
        '2024-05-06',
        '2024-05-20',
        NULL,
        '3326162409040002',
        'EM004'
    ),
    (
        '2024-07-14',
```

```
        '2024-07-29',
        '2024-07-28',
        5000.00,
        '3525017006950028',
        'EM001'
    ),
    (
        '2024-09-22',
        '2024-10-08',
        '2024-10-6',
        10000.00,
        '3525017006520020',
        'EM003'
    ),
    (
        '2024-10-03',
        '2024-10-20',
        '2024-10-17',
        15000.00,
        '3305040901072053',
        'EM002'
    ),
    (
        '2024-11-02',
        NULL,
        '2024-11-16',
        NULL,
        '3326161509700004',
        'EM005'
    );

INSERT INTO
    books_borrows
VALUES ('BK001', 1),
    ('BK003', 2),
    ('BK001', 2),
    ('BK004', 3),
    ('BK005', 4),
    ('BK002', 5);
```

```sql
--7
UPDATE borrows
SET
    return_date = CURRENT_DATE
WHERE
    member_NIK = '3326161509700004';

--8
UPDATE borrows
SET
    fine = NULL
WHERE
    member_NIK IN (
        '3525017006520020',
        '3305040901072053'
    );

--9
INSERT INTO
    borrows
VALUES (
        6,
        '2024-11-03',
        NULL,
        '2024-11-17',
        NULL,
        '3326161509700004',
        'EM005'
    );

UPDATE books SET stock = stock - 1 WHERE id = 'BK003';

--10
INSERT INTO
    employees
VALUES (
        'EM006',
        'Aspas Gata',
        'aspasgata@gmail.com',
        'L',
```

```sql
        '0895323390308',
        'Jl. Badut No.62.',
        'PS001'
    );

--11
UPDATE employees
SET
    name = 'Andi Haki',
    gender = 'L',
    phone_number = '081628492611'
WHERE
    name = 'Andi Gading';

--12
DELETE FROM members WHERE name = 'Jasmine Neroli';

DELETE FROM employees WHERE name = 'Aspas Gata';
```