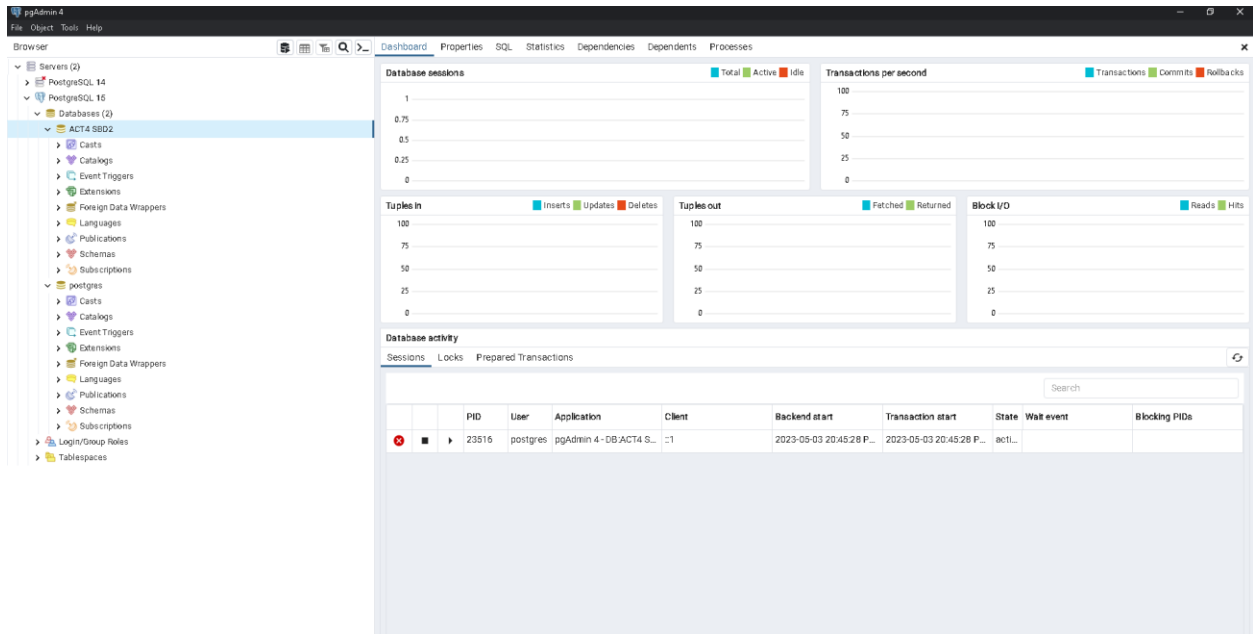


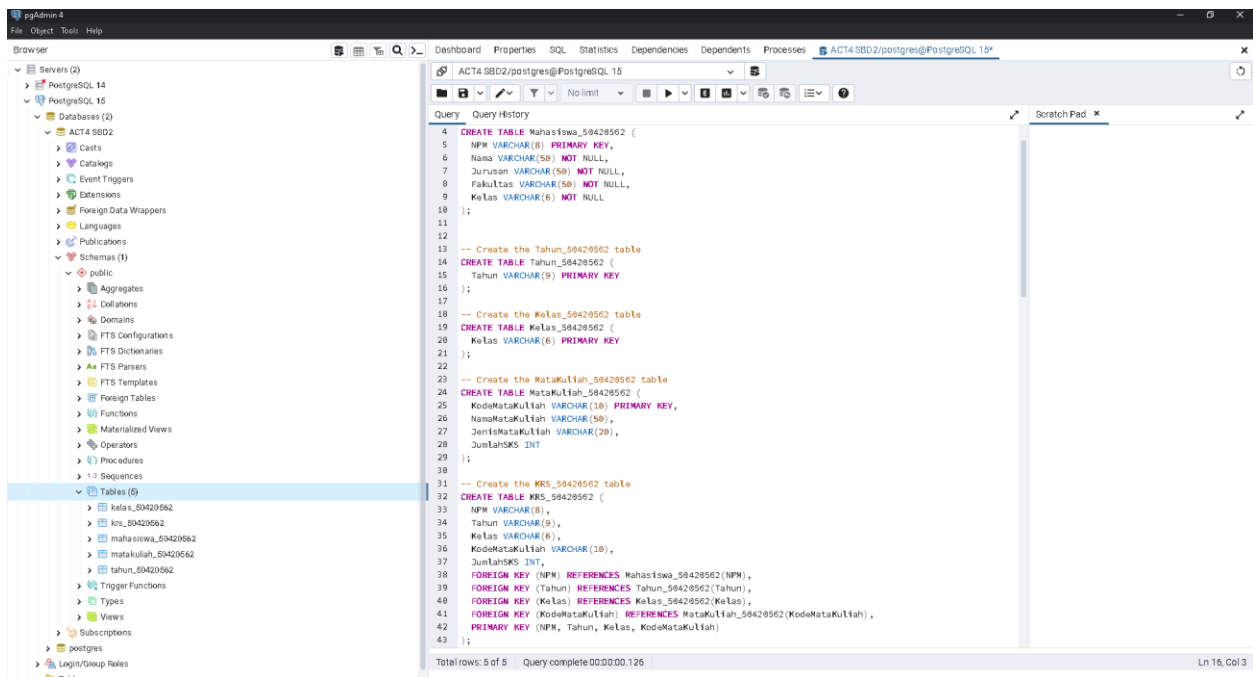
## **ACT SBD2**

Mata Praktikum : Sistem Basis Data 2  
Kelas : 3IA02  
Praktikum ke- : 4  
Tanggal : 4/5/2023  
Materi : Database System Tools  
NPM : 50420562  
Nama : Ibrahim Bramullah  
Ketua Asisten : Naufal Maulana  
Paraf Asisten :  
Nama Asisten :  
Jumlah Lembar : 8 Lembar

## Create Database



## Create Table



Data Output

125

126

127

128

129

130

131

132

133

--Data

SELECT \* FROM Kelas\_50420562;

SELECT \* FROM Krs\_50420562;

SELECT \* FROM Mahasiswa\_50420562;

SELECT \* FROM Matakuliah\_50420562;

SELECT \* FROM Tahun\_50420562;

Data Output

Messages

Notifications

	<div>kelas</div> <div>[PK] character varying (6)</div>
1	3IA01
2	3IA02

126

127

128

129

130

131

132

133

--Data

SELECT \* FROM Kelas\_50420562;

SELECT \* FROM Krs\_50420562;

SELECT \* FROM Mahasiswa\_50420562;

SELECT \* FROM Matakuliah\_50420562;

SELECT \* FROM Tahun\_50420562;

Data Output

Messages

Notifications

	<div>npm</div> <div>[PK] character varying (8)</div>	<div>tahun</div> <div>[PK] character varying (9)</div>	<div>kelas</div> <div>[PK] character varying (6)</div>	<div>kodematakuliah</div> <div>[PK] character varying (10)</div>	<div>jumlahsks</div> <div>integer</div>
1	50420562	2022/2023	3IA02	MK001	2
2	50420562	2022/2023	3IA02	MK002	2
3	50420562	2022/2023	3IA02	MK003	3
4	50420562	2022/2023	3IA02	MK004	2
5	50420562	2022/2023	3IA02	MK005	3
6	50420562	2022/2023	3IA02	MK006	2
7	50420562	2022/2023	3IA02	MK007	2
8	50420562	2022/2023	3IA02	MK008	1

```

125
126 --Data
127 SELECT * FROM Kelas_50420562;
128 SELECT * FROM Krs_50420562;
129 SELECT * FROM Mahasiswa_50420562;
130 SELECT * FROM Matakuliah_50420562;
131 SELECT * FROM Tahun_50420562;
132
133

```

Data Output Messages Notifications



	npm [PK] character varying (8)	nama character varying (50)	jurusan character varying (50)	fakultas character varying (50)	kelas character varying (6)
1	50420123	John Doe	Teknik Informatika	Teknologi Industri	3IA01
2	50420234	Jane Smith	Sistem Informasi	Teknologi Industri	3IA01
3	50420345	David Johnson	Teknik Komputer	Teknologi Industri	3IA01
4	50420456	Emily Williams	Manajemen Informatika	Teknologi Industri	3IA02
5	50420562	Ibrahim Bramullah	Teknik Informatika	Teknologi Industri	3IA02

```

125
126 --Data
127 SELECT * FROM Kelas_50420562;
128 SELECT * FROM Krs_50420562;
129 SELECT * FROM Mahasiswa_50420562;
130 SELECT * FROM Matakuliah_50420562;
131 SELECT * FROM Tahun_50420562;
132
133

```

Data Output Messages Notifications



	kodematakuliah [PK] character varying (10)	namamatakuliah character varying (50)	jenismatakuliah character varying (20)	jumlahsks integer
1	MK001	Rekayasa Perangkat Lunak 1	Wajib	2
2	MK002	Konsep Data Mining	Wajib	2
3	MK003	Teori Bahasa dan Otomata	Wajib	3
4	MK004	Rekayasa Komputasional	Wajib	2
5	MK005	Sistem Basis Data 2	Wajib	3
6	MK006	Forensik Teknologi Informasi	Pilihan	2
7	MK007	Grafik Komputer 2	Pilihan	2
8	MK008	Teknologi Game	Pilihan	1

```

124 VALUES ('50420562', '2022/2023', '3IA02', 'MK008', 1);
125
126 --Data
127 SELECT * FROM Kelas_50420562;
128 SELECT * FROM Krs_50420562;
129 SELECT * FROM Mahasiswa_50420562;
130 SELECT * FROM Matakuliah_50420562;
131 SELECT * FROM Tahun_50420562;
132
133

```

Data Output Messages Notifications



	tahun [PK] character varying (9)
1	2022/2023

## SQL CODE:

```
---Create Table

-- Create the Mahasiswa_50420562 table
CREATE TABLE Mahasiswa_50420562 (
  NPM VARCHAR(8) PRIMARY KEY,
  Nama VARCHAR(50) NOT NULL,
  Jurusan VARCHAR(50) NOT NULL,
  Fakultas VARCHAR(50) NOT NULL,
  Kelas VARCHAR(6) NOT NULL
);

-- Create the Tahun_50420562 table
CREATE TABLE Tahun_50420562 (
  Tahun VARCHAR(9) PRIMARY KEY
);

-- Create the Kelas_50420562 table
CREATE TABLE Kelas_50420562 (
  Kelas VARCHAR(6) PRIMARY KEY
);

-- Create the MataKuliah_50420562 table
CREATE TABLE MataKuliah_50420562 (
  KodeMataKuliah VARCHAR(10) PRIMARY KEY,
  NamaMataKuliah VARCHAR(50),
  JenisMataKuliah VARCHAR(20),
  JumlahSKS INT
);

-- Create the KRS_50420562 table
CREATE TABLE KRS_50420562 (
  NPM VARCHAR(8),
  Tahun VARCHAR(9),
  Kelas VARCHAR(6),
  KodeMataKuliah VARCHAR(10),
  JumlahSKS INT,
  FOREIGN KEY (NPM) REFERENCES Mahasiswa_50420562(NPM),
  FOREIGN KEY (Tahun) REFERENCES Tahun_50420562(Tahun),
  FOREIGN KEY (Kelas) REFERENCES Kelas_50420562(Kelas),
  FOREIGN KEY (KodeMataKuliah) REFERENCES MataKuliah_50420562(KodeMataKuliah),
  PRIMARY KEY (NPM, Tahun, Kelas, KodeMataKuliah)
);
```

```
---Insert Table

-- Kelas
INSERT INTO Kelas_50420562 (Kelas)
VALUES ('3IA01');

INSERT INTO Kelas_50420562 (Kelas)
VALUES ('3IA02');

--Tahun
INSERT INTO tahun_50420562 (tahun) VALUES ('2022/2023');

-- MataKuliah
INSERT INTO MataKuliah_50420562 (KodeMataKuliah, NamaMataKuliah, JenisMataKuliah,
JumlahSKS)
VALUES ('MK001', 'Rekayasa Perangkat Lunak 1', 'Wajib', 2);

INSERT INTO MataKuliah_50420562 (KodeMataKuliah, NamaMataKuliah, JenisMataKuliah,
JumlahSKS)
VALUES ('MK002', 'Konsep Data Mining', 'Wajib', 2);

INSERT INTO MataKuliah_50420562 (KodeMataKuliah, NamaMataKuliah, JenisMataKuliah,
JumlahSKS)
VALUES ('MK003', 'Teori Bahasa dan Otomata', 'Wajib', 3);

INSERT INTO MataKuliah_50420562 (KodeMataKuliah, NamaMataKuliah, JenisMataKuliah,
JumlahSKS)
VALUES ('MK004', 'Rekayasa Komputasional', 'Wajib', 2);

INSERT INTO MataKuliah_50420562 (KodeMataKuliah, NamaMataKuliah, JenisMataKuliah,
JumlahSKS)
VALUES ('MK005', 'Sistem Basis Data 2', 'Wajib', 3);

INSERT INTO MataKuliah_50420562 (KodeMataKuliah, NamaMataKuliah, JenisMataKuliah,
JumlahSKS)
VALUES ('MK006', 'Forensik Teknologi Informasi', 'Pilihan', 2);

INSERT INTO MataKuliah_50420562 (KodeMataKuliah, NamaMataKuliah, JenisMataKuliah,
JumlahSKS)
VALUES ('MK007', 'Grafik Komputer 2', 'Pilihan', 2);

INSERT INTO MataKuliah_50420562 (KodeMataKuliah, NamaMataKuliah, JenisMataKuliah,
JumlahSKS)
```

```
VALUES ('MK008', 'Teknologi Game', 'Pilihan', 1);

-- Mahasiswa
INSERT INTO Mahasiswa_50420562 (NPM, Nama, Jurusan, Fakultas, Kelas)
VALUES ('50420123', 'John Doe', 'Teknik Informatika', 'Teknologi Industri',
'3IA01');

INSERT INTO Mahasiswa_50420562 (NPM, Nama, Jurusan, Fakultas, Kelas)
VALUES ('50420234', 'Jane Smith', 'Sistem Informasi', 'Teknologi Industri',
'3IA01');

INSERT INTO Mahasiswa_50420562 (NPM, Nama, Jurusan, Fakultas, Kelas)
VALUES ('50420345', 'David Johnson', 'Teknik Komputer', 'Teknologi Industri',
'3IA01');

-- Mahasiswa (continued)
INSERT INTO Mahasiswa_50420562 (NPM, Nama, Jurusan, Fakultas, Kelas)
VALUES ('50420456', 'Emily Williams', 'Manajemen Informatika', 'Teknologi
Industri', '3IA02');

INSERT INTO Mahasiswa_50420562 (NPM, Nama, Jurusan, Fakultas, Kelas)
VALUES ('50420562', 'Ibrahim Bramullah', 'Teknik Informatika', 'Teknologi
Industri', '3IA02');

-- KRS
INSERT INTO KRS_50420562 (NPM, Tahun, Kelas, KodeMataKuliah, JumlahSKS)
VALUES ('50420562', '2022/2023', '3IA02', 'MK001', 2);

INSERT INTO KRS_50420562 (NPM, Tahun, Kelas, KodeMataKuliah, JumlahSKS)
VALUES ('50420562', '2022/2023', '3IA02', 'MK002', 2);

INSERT INTO KRS_50420562 (NPM, Tahun, Kelas, KodeMataKuliah, JumlahSKS)
VALUES ('50420562', '2022/2023', '3IA02', 'MK003', 3);

INSERT INTO KRS_50420562 (NPM, Tahun, Kelas, KodeMataKuliah, JumlahSKS)
VALUES ('50420562', '2022/2023', '3IA02', 'MK004', 2);

INSERT INTO KRS_50420562 (NPM, Tahun, Kelas, KodeMataKuliah, JumlahSKS)
VALUES ('50420562', '2022/2023', '3IA02', 'MK005', 3);

INSERT INTO KRS_50420562 (NPM, Tahun, Kelas, KodeMataKuliah, JumlahSKS)
VALUES ('50420562', '2022/2023', '3IA02', 'MK006', 2);

INSERT INTO KRS_50420562 (NPM, Tahun, Kelas, KodeMataKuliah, JumlahSKS)
VALUES ('50420562', '2022/2023', '3IA02', 'MK007', 2);
```

```
INSERT INTO KRS_50420562 (NPM, Tahun, Kelas, KodeMataKuliah, JumlahSKS)
VALUES ('50420562', '2022/2023', '3IA02', 'MK008', 1);
```

```
--Data
```

```
SELECT * FROM Mahasiswa_50420562;
```