

## Nama Pembuat: Kevin Lie

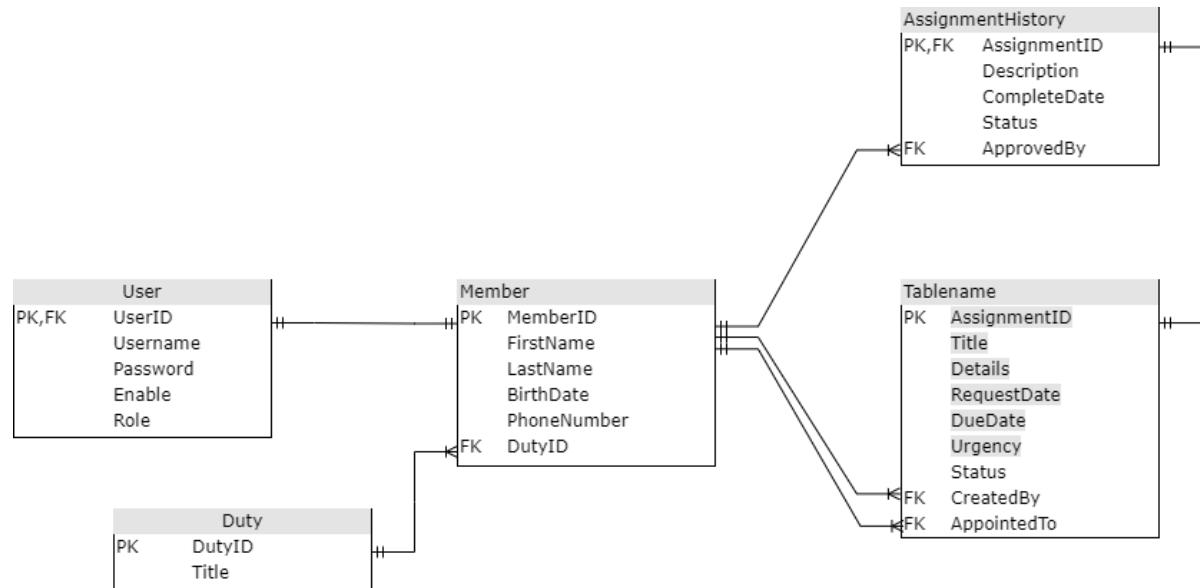
Project yang dibuat merupakan mini project spring boot yang diperuntukan untuk membantu dalam mencatat dan melacak detail kegiatan yang dilakukan suatu divisi

(code B Staff member di aplikasi - ketua divisi)

(Code A Admin di aplikasi - mengatur kegiatan aplikasi – membuat assignment ticket)

(Code C Chairman organisasi - memfinalisasi approval assignment ticket)

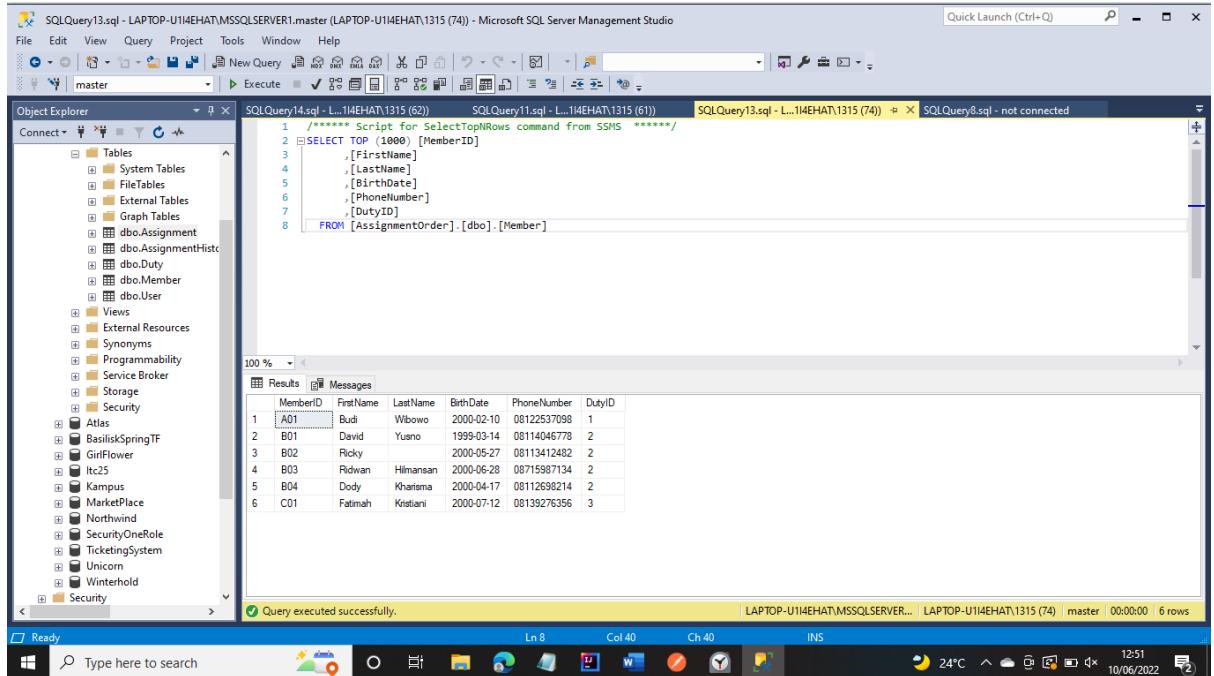
## ERD



## Kerja Aplikasi

### 1. Contoh crud (pada member)

- Menambahkan member



SQLQuery13.sql - LAPTOP-U1I4EHAT\MSQLSERVER1.master (LAPTOP-U1I4EHAT\1315 (74)) - Microsoft SQL Server Management Studio

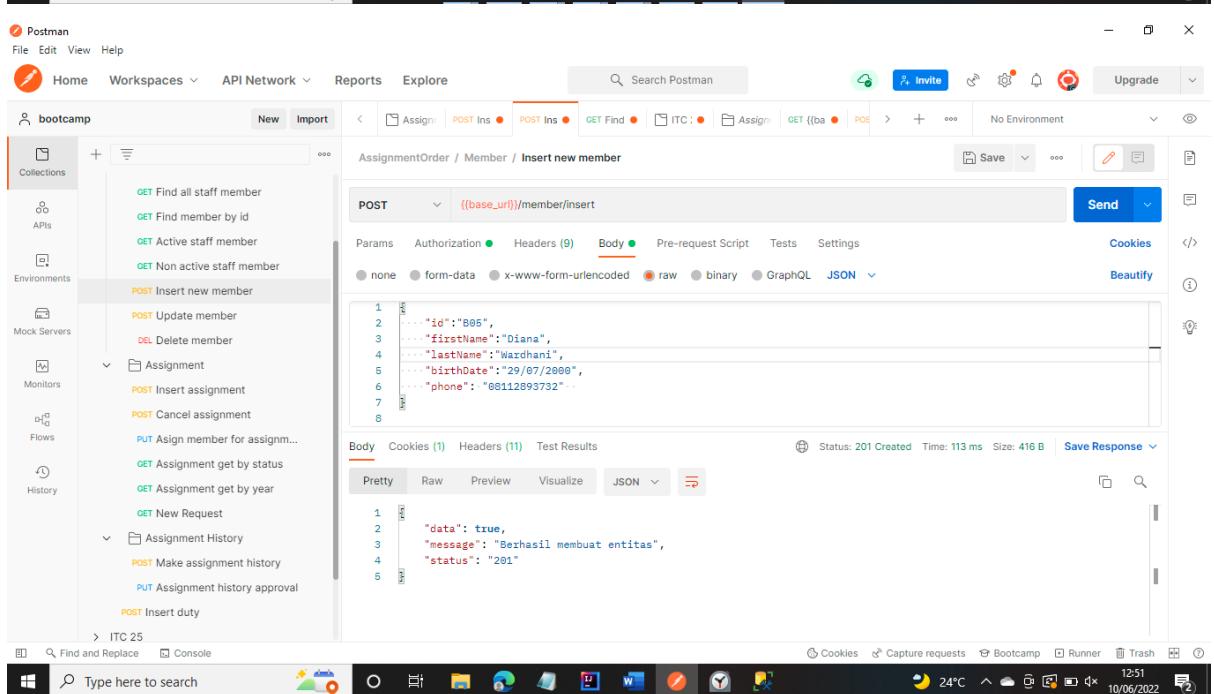
```
1 /*===== Script for SelectTopNRows command from SSMS =====*/
2 SELECT TOP (1000) [MemberID]
3     ,[FirstName]
4     ,[LastName]
5     ,[BirthDate]
6     ,[PhoneNumber]
7     ,[DutyID]
8 FROM [AssignmentOrder].[dbo].[Member]
```

Results Messages

	MemberID	FirstName	LastName	BirthDate	PhoneNumber	DutyID
1	A01	Budi	Wibowo	2000-02-10	08122537098	1
2	B01	David	Yusno	1999-03-14	08114046778	2
3	B02	Ricky		2000-05-27	08113412482	2
4	B03	Ridwan	Hilmansan	2000-06-28	08175987134	2
5	B04	Dody	Kharisma	2000-04-17	08112698214	2
6	C01	Fatimah	Kristiani	2000-07-12	08139276356	3

Query executed successfully.

Ready Type here to search 24°C 12:51 10/06/2022

Postman Home Workspaces API Network Reports Explore

bootcamp

AssignmentOrder / Member / Insert new member

POST {{base\_url}}/member/insert

Params Authorization Headers (9) Body Pre-request Script Tests Settings Cookies Beautify

Body

```
1 {
2     "id": "B05",
3     "firstName": "Diana",
4     "lastName": "Wardhani",
5     "birthDate": "29/07/2000",
6     "phone": "08112893732"
7 }
```

Status: 201 Created Time: 113 ms Size: 416 B Save Response

Find and Replace Console

SQLQuery13.sql - LAPTOP-U114EHAT\MSQLSERVER1.master (LAPTOP-U114EHAT\1315 (74)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

master | Execute | New Query | Quick Launch (Ctrl+Q) |

Object Explorer

SQLQuery14.sql - ...114EHAT\1315 (62) SQLQuery11.sql - ...114EHAT\1315 (61) SQLQuery13.sql - ...114EHAT\1315 (74) SQLQuery8.sql - not connected

```
1 /*===== Script for SelectTopNRows command from SSMS =====*/
2 SELECT TOP (1000) [MemberID]
3     ,[FirstName]
4     ,[LastName]
5     ,[BirthDate]
6     ,[PhoneNumber]
7     ,[DutyID]
8 FROM [AssignmentOrder].[dbo].[Member]
```

Results Messages

	MemberID	FirstName	LastName	BirthDate	PhoneNumber	DutyID
1	A01	Budi	Wibowo	2000-02-10	08122537098	1
2	B01	David	Yusno	1999-03-14	08114046778	2
3	B02	Ricky		2000-05-27	08113412482	2
4	B03	Ridwan	Himansan	2000-06-28	08115987134	2
5	B04	Dody	Kharisma	2000-04-17	08112698214	2
6	B05	Diana	Wardhani	2000-07-29	08112893732	2
7	C01	Fatimah	Kristiani	2000-07-12	08139276356	3

Query executed successfully.

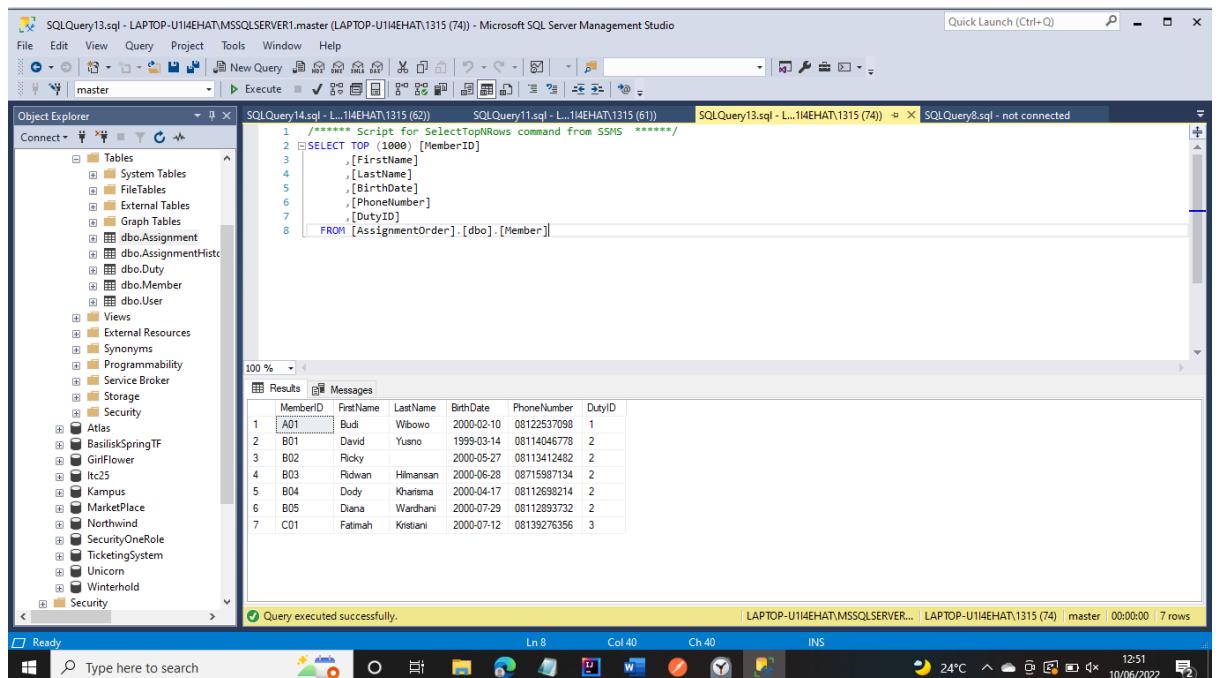
LAPTOP-U114EHAT\MSQLSERVER1... | LAPTOP-U114EHAT\1315 (74) | master | 00:00:00 | 7 rows

Ready Type here to search

Ln 8 Col 40 Ch 40 INS

24°C 12:51 10/06/2022

- Melakukan Update



The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, there are several database objects like Tables, System Tables, External Tables, etc. In the center pane, a query window displays the following SQL script:

```

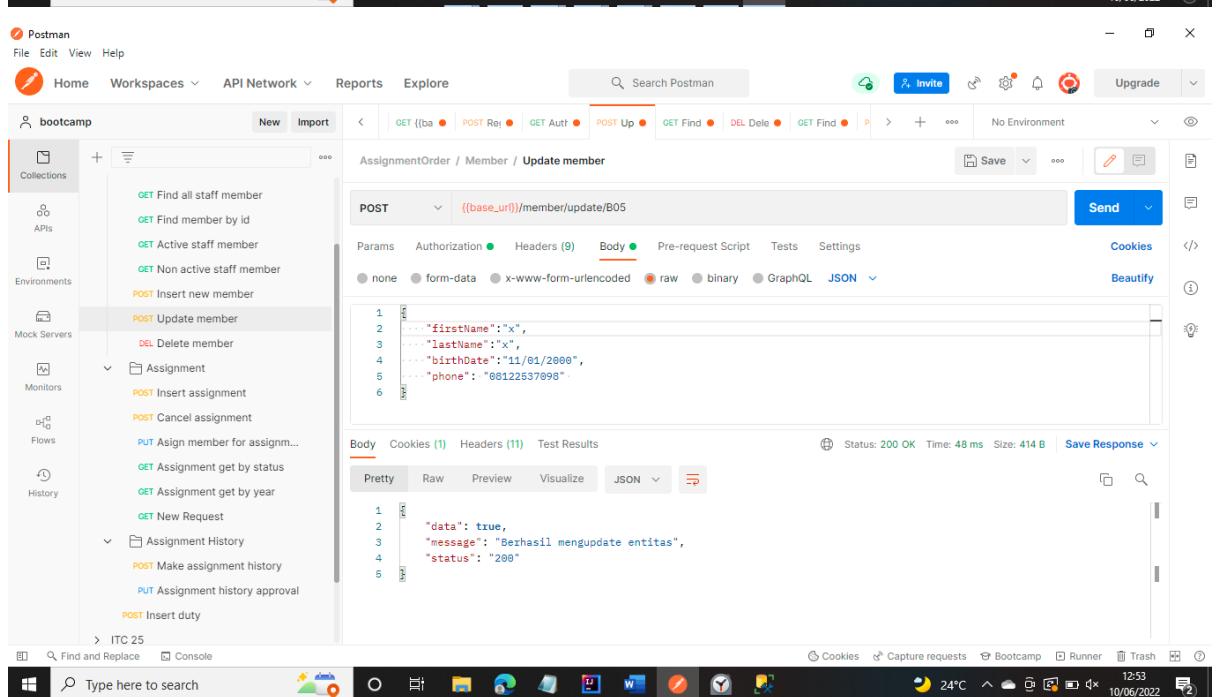
1 /****** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [MemberID]
3     ,[FirstName]
4     ,[LastName]
5     ,[BirthDate]
6     ,[PhoneNumber]
7     ,[DutyID]
8  FROM [AssignmentOrder].[dbo].[Member]

```

The results pane shows a table with 7 rows of data:

MemberID	FirstName	LastName	BirthDate	PhoneNumber	DutyID
A01	Budi	Wibowo	2000-02-10	08122537098	1
B01	David	Yusno	1999-03-14	08114046778	2
B02	Ricky		2000-05-27	08113412482	2
B03	Ridwan	Hilmanan	2000-06-28	08715987134	2
B04	Dody	Khartina	2000-04-17	08112698214	2
B05	Diana	Wardhani	2000-07-29	08112893732	2
C01	Fatmah	Kristiani	2000-07-12	08139276356	3

At the bottom, a message says "Query executed successfully."

The screenshot shows the Postman application interface. On the left, there's a sidebar with collections, environments, and other tools. The main area shows a collection named "bootcamp". Under "bootcamp", there are several API endpoints listed under "AssignmentOrder / Member / Update member". A specific POST request is selected, with the URL being `((base_url))/member/update/B05`. The "Body" tab is selected, showing the following JSON payload:

```

1 {
2   "firstName": "x",
3   "lastName": "x",
4   "birthDate": "11/01/2000",
5   "phone": "68122537098"
6 }

```

Below the body, the response status is shown as "Status: 200 OK Time: 48 ms Size: 414 B". The response body is also displayed:

```

1 {
2   "data": true,
3   "message": "Berhasil mengupdate entitas",
4   "status": "200"
5 }

```

SQLQuery13.sql - LAPTOP-U1I4EHAT\MSQLSERVER1.master (LAPTOP-U1I4EHAT\1315 (74)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Quick Launch (Ctrl+Q)

master Execute

Object Explorer

SQLQuery14.sql - L..1I4EHAT\1315 (62) SQLQuery11.sql - L..1I4EHAT\1315 (61) SQLQuery13.sql - L..1I4EHAT\1315 (74) SQLQuery8.sql - not connected

Tables System Tables FileTables External Tables Graph Tables dbo.AssignmentHistory dbo.Duty dbo.Member dbo.User Views External Resources Synonyms Programmability Service Broker Storage Security

Atlas BasiliskSpringTF GirlFlower It25 Kampus MarketPlace Northwind SecurityOneRole TicketingSystem Unicorn Winterhold Security

SQLQuery14.sql - L..1I4EHAT\1315 (62)

```
1 /***** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [MemberID]
3     ,[FirstName]
4     ,[LastName]
5     ,[BirthDate]
6     ,[PhoneNumber]
7     ,[DutyID]
8 FROM [AssignmentOrder].[dbo].[Member]
```

Results Messages

	MemberID	FirstName	LastName	BirthDate	PhoneNumber	DutyID
1	A01	Budi	Wibowo	2000-02-10	08122537098	1
2	B01	David	Yusno	1999-03-14	08114046778	2
3	B02	Ricky		2000-05-27	08113412482	2
4	B03	Ridwan	Hilmanean	2000-06-28	08715987134	2
5	B04	Dody	Khatisma	2000-04-17	08112698214	2
6	B05	x	x	2000-01-11	08122537098	2
7	C01	Falma	Kristiani	2000-07-12	08139276356	3

Query executed successfully.

LAPTOP-U1I4EHAT\MSQLSERVER... | LAPTOP-U1I4EHAT\1315 (74) master 00:00:00 | 7 rows

Ready Type here to search

Windows Taskbar: 24°C 12:54 10/06/2022

- Melakukan delete

Screenshot of Microsoft SQL Server Management Studio (SSMS) showing a query execution and results.

**Object Explorer:**

- Tables: Assignment, AssignmentHistory, AssignmentOrder, Member, User
- System Tables: sys, fn, ft, et, g, h, i, m, s, t, v, w, x, y, z
- FileTables
- External Tables
- Graph Tables
- Programmability: Assemblies, Functions, Procedures, Triggers, Types, XML
- Service Broker
- Storage: Databases, File Groups, Files, Log Files
- Security: Logins, Roles, Schemas, Users, Views, Synonyms, Programmability, Service Broker, Storage, Security
- Atlas
- BasiliskSpringTF
- GirlFlower
- Itc25
- Kampus
- MarketPlace
- Northwind
- SecurityOneRole
- TicketingSystem
- Unicorn
- Winterhold
- Security

**SQL Query Editor:**

```
1 /****** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [MemberID]
3     ,[FirstName]
4     ,[LastName]
5     ,[BirthDate]
6     ,[PhoneNumber]
7     ,[DutyID]
8  FROM [AssignmentOrder].[dbo].[Member]
```

**Results Grid:**

MemberID	FirstName	LastName	BirthDate	PhoneNumber	DutyID
A01	Budi	Wibowo	2000-02-10	08122537098	1
B01	David	Yusno	1999-03-14	08114046778	2
B02	Ricky		2000-05-27	08113412482	2
B03	Ridwan	HilmanSan	2000-06-28	08715987134	2
B04	Dody	Khartama	2000-04-17	08112698214	2
B05	x	x	2000-01-11	08122537098	2
C01	Fatimah	Kristiani	2000-07-12	08139276356	3

**Messages:**

Query executed successfully.

**Postman API Client:**

**Environment:** bootcamp

**Collection:** AssignmentOrder / Member / Delete member

**Method:** DELETE `((base_url))/member/delete/B05`

**Authorization:** Basic Auth

Type: Basic Auth

Username: Budi

Password: .....  
 Show Password

**Body:**

```
1 "data": true,
2 "message": "Berhasil menghapus entitas",
3 "status": "200"
```

Status: 200 OK Time: 87 ms Size: 413 B Save Response

SQLQuery13.sql - LAPTOP-U1I4EHAT\MSQLSERVER1.master (LAPTOP-U1I4EHAT\1315 (74)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Quick Launch (Ctrl+Q)

master Execute

Object Explorer

SQLQuery14.sql - L..1I4EHAT\1315 (62) SQLQuery11.sql - L..1I4EHAT\1315 (61) SQLQuery13.sql - L..1I4EHAT\1315 (74) SQLQuery8.sql - not connected

Tables System Tables FileTables External Tables Graph Tables dbo.AssignmentHist dbo.Assignment dbo.Duty dbo.Member dbo.User Views External Resources Synonyms Programmability Service Broker Storage Security

Atlas BasiliskSpringTF GirlFlower It25 Kampus MarketPlace Northwind SecurityOneRole TicketingSystem Unicorn Winterhold Security

SQLQuery14.sql - L..1I4EHAT\1315 (62)

```
1 /***** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [MemberID]
3     ,[FirstName]
4     ,[LastName]
5     ,[BirthDate]
6     ,[PhoneNumber]
7     ,[DutyID]
8 FROM [AssignmentOrder].[dbo].[Member]
```

Results Messages

	MemberID	FirstName	LastName	BirthDate	PhoneNumber	DutyID
1	A01	Budi	Wibowo	2000-02-10	0812537098	1
2	B01	David	Yusno	1999-03-14	08114046778	2
3	B02	Ricky		2000-05-27	08113412482	2
4	B03	Ridwan	Hilmanean	2000-06-28	08715987134	2
5	B04	Dody	Khatrima	2000-04-17	08112698214	2
6	C01	Fatmah	Kristiani	2000-07-12	08139276356	3

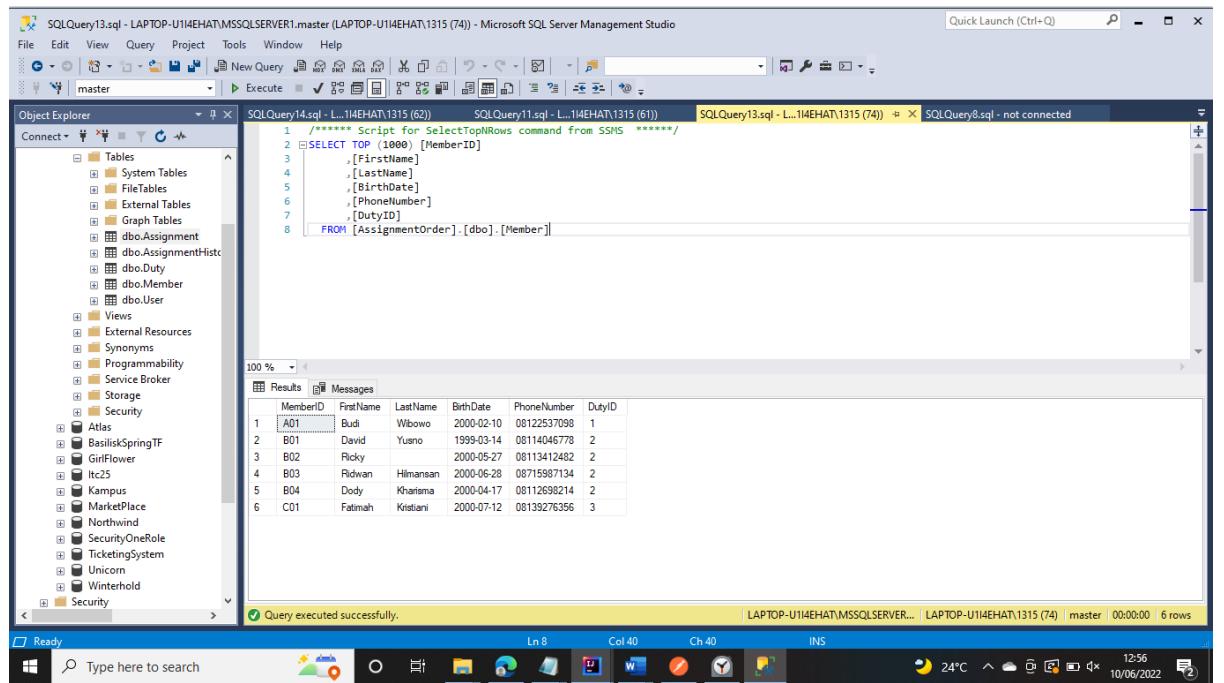
Query executed successfully.

LAPTOP-U1I4EHAT\MSQLSERVER... | LAPTOP-U1I4EHAT\1315 (74) master 00:00:00 | 6 rows

Ready Type here to search

Ln 8 Col 40 Ch 40 INS

24°C 10/06/2022



The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. In the center, there's a results grid titled 'Results' showing six rows of data from a query. The columns are MemberID, FirstName, LastName, BirthDate, PhoneNumber, and DutyID. The data includes entries for members A01 through C01. At the bottom of the results grid, it says 'Query executed successfully.' Below the results grid is a status bar with 'LN 8' and 'INS'. At the very bottom of the screen is a Windows taskbar with icons for Start, Search, Task View, File Explorer, Edge, Mail, Photos, and File Explorer again, along with system information like '24°C' and the date '10/06/2022'.

## 2. Membuat assignment

The screenshot displays two windows side-by-side. On the left is the Postman application, which is a tool for testing RESTful APIs. In the center of the Postman interface, under the 'Assignment' collection, is a POST request to 'Insert assignment'. The request body contains the following JSON:

```
1   "title": "Mempersiapkan ruang",
2   "details": "Mencari ruang sesuai kebutuhan acara kemahasiswaan",
3   "requestDate": "12/01/2022",
4   "dueDate": "27/01/2022",
5   "urgency": "medium"
6
7 }
```

The response status is 200 OK, and the message is "Berhasil membuat entitas" with a status of 200.

On the right is Microsoft SQL Server Management Studio (SSMS), showing a query window with the following SQL script:

```
1 /* Script for SelectTopNRows command from SSMS */
2 SELECT TOP (1000) [AssignmentID]
3   ,[Title]
4   ,[Details]
5   ,[RequestDate]
6   ,[DueDate]
7   ,[Urgency]
8   ,[Status]
9   ,[CreatedBy]
10  ,[AppointedTo]
11 FROM [AssignmentOrder].[dbo].[Assignment]
```

The results pane shows one row of data:

AssignmentID	Title	Details	RequestDate	DueDate	Urgency	Status	CreatedBy	AppointedTo	
1	ARQ/2022/1	Mempersiapkan ruang	Mencari ruang sesuai kebutuhan acara kemahasiswaan	2022-01-12	2022-01-17	MEDIUM	IN_PROGRESS	NULL	NULL

At the bottom of the SSMS window, it says "Query executed successfully."

### 3. Assign staff member to assignment

Postman

File Edit View Help

Home Workspaces API Network Reports Explore

Search Postman

AssignmentOrder / Assignment / Assign member for assignment

PUT `((base_url))/assignment/put-ad-st?assignmentId=ARQ/2022/1&memberIdAd=A01&memberIdSt=B01`

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Query Params

KEY	VALUE	DESCRIPTION	Bulk Edit
assignmentId	ARQ/2022/1		
memberIdAd	A01		
memberIdSt	B01		

Body Cookies (1) Headers (11) Test Results

Pretty Raw Preview Visualize JSON

1    2    3    4    5

```
1    "data": true,
2    "message": "Berhasil menambahkan entitas admin dan member staff ke assignment",
3    "status": "200"
```

Body Cookies (1) Headers (11) Test Results

Pretty Raw Preview Visualize JSON

1    2    3    4    5

```
1    "data": true,
2    "message": "Berhasil menambahkan entitas admin dan member staff ke assignment",
3    "status": "200"
```

Find and Replace Console

Type here to search

Microsoft SQL Server Management Studio

File Edit View Project Tools Window Help

New Query

master

Execute

Object Explorer

SQLQuery11.sql - LAPTOP-U1I4EHAT\MSQLSERVER1.master (LAPTOP-U1I4EHAT\1315 (61)) - Microsoft SQL Server Management Studio

SQLQuery11.sql - L...1I4EHAT\1315 (61)) SQLQuery13.sql - L...1I4EHAT\1315 (74)) SQLQuery8.sql - not connected

Script for SelectTopNRows command from SSMS [AssignmentID]

```
1    /****** Script for SelectTopNRows command from SSMS *****/
2    2    SELECT TOP (1000) [AssignmentID]
3    3    , [Title]
4    4    , [Details]
5    5    , [RequestDate]
6    6    , [DueDate]
7    7    , [Urgency]
8    8    , [Status]
9    9    , [CreatedBy]
10 10    , [AppointedTo]
11 11    FROM [AssignmentOrder].[dbo].[Assignment]
```

Results Messages

AssignmentID	Title	Details	RequestDate	DueDate	Urgency	Status	CreatedBy	AppointedTo
1 ARQ/2022/1	Mempersiapkan ruang	Mencari ruang sesuai kebutuhan acara kemahasiswaan	2022-01-12	2022-01-17	MEDIUM	IN_PROGRESS	A01	B01

Query executed successfully.

LAPTOP-U1I4EHAT\MSQLSERVER1... | LAPTOP-U1I4EHAT\1315 (61) | master | 00:00:00 | 1 rows

Ready Type here to search

24°C 13:02 10/06/2022

#### 4. Assignment cancel example

**Postman**

File Edit View Help

Home Workspaces API Network Reports Explore

AssignmentOrder / Assignment / Cancel assignment

POST `((base_url))/assignment/cancel?assignmentId=ARQ/2022/1`

Params Authorization Headers (8) Body Pre-request Script Tests Settings

Type Basic Auth Username Budi

The authorization header will be automatically generated when you send the request.

Authorization

Body Cookies (1) Headers (11) Test Results

Pretty Raw Preview Visualize JSON

```

1
2   "data": true,
3   "message": "Assignment berhasil dicancel",
4   "status": "201"
5

```

Status: 200 OK Time: 64 ms Size: 415 B Save Response

Find and Replace Console

**SQL Server Management Studio**

File Edit View Query Project Tools Window Help

master SQLQuery11.sql - LAPTOP-U114EHAT\MSQLSERVER1.master (LAPTOP-U114EHAT\1315 (61)) - Microsoft SQL Server Management Studio

Object Explorer

Tables System Tables FileTables External Tables Graph Tables dbo.Assignment dbo.AssignmentHistory dbo.Duty dbo.Member dbo.User Views External Resources Synonyms Programmability Service Broker Storage Security Atlas BasiliskSpringTF GrlFlower Itc25 Kampus MarketPlace Northwind SecurityOnRole TicketingSystem Unicorn Winterhold Security

SQLQuery14.sql - ...114EHAT\1315 (62) SQLQuery11.sql - ...114EHAT\1315 (61) SQLQuery13.sql - ...114EHAT\1315 (74) SQLQuery8.sql - not connected

```

1 /****** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [AssignmentID]
3   ,[Title]
4   ,[Details]
5   ,[RequestDate]
6   ,[DueDate]
7   ,[Urgency]
8   ,[Status]
9   ,[CreatedBy]
10  ,[AppointedTo]
11  FROM [AssignmentOrder].[dbo].[Assignment]

```

Results Messages

AssignmentID	Title	Details	RequestDate	DueDate	Urgency	Status	CreatedBy	AppointedTo
1 ARQ/2022/1	Mempersiapkan ruang	Mencari ruang sesuai kebutuhan acara kemahasiswaan	2022-01-12	2022-01-17	MEDIUM	CANCELED	A01	B01
2 ARQ/2022/2	Mempersiapkan perangkat pameran	Melakukan persiapan perangkat yang akan di pamer...	2022-01-13	2022-01-17	HIGH	IN_PROGRESS	A01	B02

Query executed successfully.

## 5. Assignment complete example dan approval

Screenshot of Microsoft SQL Server Management Studio (SSMS) showing the execution of a SQL query and its results.

**Object Explorer:**

- Master database selected.
- Tables node expanded, showing System Tables, FileTables, External Tables, Graph Tables, dbo.Assignment, dbo.AssignmentHistory, dbo.Duty, dbo.Member, dbo.User, Views, External Resources, Synonyms, Programmability, Service Broker, Storage, Security, and several sample databases (Atlas, BasiliskSpringTF, GirlFlower, Itc25, Kampus, MarketPlace, Northwind, SecurityOneRole, TicketingSystem, Unicorn, Winterhold).

**SQL Query Editor:**

```
1 /****** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [AssignmentID]
3     ,[Title]
4     ,[Details]
5     ,[RequestDate]
6     ,[DueDate]
7     ,[Urgency]
8     ,[Status]
9     ,[CreatedBy]
10    ,[AppointedTo]
11   FROM [AssignmentOrder].[dbo].[Assignment]
```

**Results Grid:**

AssignmentID	Title	Details	RequestDate	DueDate	Urgency	Status	CreatedBy	AppointedTo
ARQ/2022/1	Mempersiapkan ruang	Mencari ruang sesuai kebutuhan acara kemahasiswaan	2022-01-12	2022-01-17	MEDIUM	CANCELED	A01	B01
ARQ/2022/2	Mempersiapkan perangkat pameran	Melakukan persiapan perangkat yang akan di pamer...	2022-01-13	2022-01-17	HIGH	IN_PROGRESS	A01	B02

**Messages:**

Query executed successfully.

**Postman:**

The Postman interface shows a collection named "bootcamp". A POST request is being prepared to insert an assignment history entry. The URL is `((base_url))/assignmentHistory/insert?assignmentId=ARQ/2022/2`. The request body contains JSON data:

```
1 {
2     "data": true,
3     "message": "Berhasil membuat assignment history",
4     "status": "200"
5 }
```

The response status is 200 OK, time 70 ms, size 422 B.

The screenshot shows the Microsoft SQL Server Management Studio interface. The title bar indicates the connection is to 'LAPTOP-U114EHAT\mssqlserver1.master' (L1315 (61)). The Object Explorer sidebar shows the database structure with various tables like 'Tables', 'System Tables', 'FileTables', etc. The main pane displays a T-SQL script for selecting top 1000 rows from the 'Assignment' table, ordered by 'AssignmentID'. The results pane shows two rows of data from the 'Assignment' table, with columns including AssignmentID, Title, Details, RequestDate, DueDate, Urgency, Status, CreatedBy, and AppointedTo. The status bar at the bottom shows the query was executed successfully and took 00:00:00.

	AssignmentID	Title	Details	RequestDate	DueDate	Urgency	Status	CreatedBy	AppointedTo
1	ARQ/2022/1	Mempersiapkan ruang	Mencari ruang sesuai kebutuhan acara kemahasiswaan	2022-01-12	2022-01-17	MEDIUM	CANCELED	A01	B01
2	ARQ/2022/2	Mempersiapkan perangkat pameran	Melakukan persiapan perangkat yang akan di pameran	2022-01-13	2022-01-17	HIGH	COMPLETED	A01	B02

The screenshot shows the Microsoft SQL Server Management Studio (SSMS) interface. The title bar indicates the connection is to 'LAPTOP-U114EHAT\mssqlserver1.master' (LAPTOP-U114EHAT\1315 (62)). The Object Explorer sidebar lists various database objects like Tables, Views, and Procedures. The central pane displays a T-SQL script for selecting top 1000 rows from the 'AssignmentHistory' table, specifically filtering for assignments with ID 1. The results pane shows one row returned, which is highlighted in yellow. The status bar at the bottom shows the message 'Query executed successfully.' and other session details.

SQLQuery14.sql - LAPTOP-U114EHAT\mssqlserver1.master (LAPTOP-U114EHAT\1315 (62)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Quick Launch (Ctrl+Q)

master

Object Explorer

SQLQuery14.sql - L...114EHAT\1315 (62) X SQLQuery11.sql - L...114EHAT\1315 (61) SQLQuery13.sql - L...114EHAT\1315 (74) SQLQuery8.sql - not connected

Connect...

Tables

System Tables

FileTables

External Tables

Graph Tables

dbo.Assignment

dbo.AssignmentHistc

dbo.Duty

dbo.Member

dbo.User

Views

External Resources

Synonyms

Programmability

Service Broker

Storage

Security

Atlas

BasiliskSpringTF

GirlFlower

It25

Kampus

MarketPlace

Northwind

SecurityOneRole

TicketingSystem

Unicorn

Winterhold

Security

SQLQuery14.sql (L...114EHAT\1315 (62))

```
1 /*===== Script for SelectTopNRows command from SSMS =====*/
2 SELECT TOP (1000) [AssignmentID]
3     ,[Description]
4     ,[CompletedDate]
5     ,[Status]
6     ,[ApprovedBy]
7 FROM [AssignmentOrder].[dbo].[AssignmentHistory]
```

Results Messages

	AssignmentID	Description	CompletedDate	Status	ApprovedBy
1	ARQ/2022/2	Perangkat sudah dipersiapkan dan ready 1 hr sebe...	2022-01-16	ON_TIME	NULL

Query executed successfully.

LAPTOP-U114EHAT\mssqlserver1... LAPTOP-U114EHAT\1315 (62) master 00:00:00 1 rows

Ready

Ln 1 Col 1 Ch 1 INS

24°C 13:09 10/06/2022

Postman

File Edit View Help

Home Workspaces API Network Reports Explore

Search Postman

PUT Asig ● POST Car ● POST Make

PUT Assi ● GET Activ ● GET Non ● GET Assi ●

AssignmentOrder / Assignment History / Assignment history approval

PUT {{base\_url}}/assignmentHistory/approve?memberId=C01&assignmentHistoryId=ARQ/2022/2

No new changes to save.

Params Authorization Headers (8) Body Pre-request Script Tests Settings Cookies

Type Basic Auth Username Fatimah

The authorization header will be automatically generated when you send the request.

Authorization

Body Cookies (1) Headers (11) Test Results

Pretty Raw Preview Visualize JSON

1    "data": true,  
2    "message": "Assignment berhasil di approve",  
3    "status": "200"  
4  
5

Find and Replace Console

Cookies Capture requests Bootcamp Runner Trash

24°C 13:10 10/06/2022

SQLQuery14.sql - LAPTOP-U114EHAT\MSQLSERVER1.master (LAPTOP-U114EHAT\1315 (62)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

New Query Object Explorer

master

Execute

Object Explorer

Tables

Views

External Resources

Synonyms

Programmability

Service Broker

Storage

Security

Atlas

BasiliskSpringTF

GirFlower

Itc25

Kampus

MarketPlace

Northwind

SecurityOneRole

TicketingSystem

Unicorn

Winterhold

Security

SQLQuery14.sql - L...114EHAT\1315 (62))

SQLQuery11.sql - L...114EHAT\1315 (61))

SQLQuery3.sql - L...114EHAT\1315 (74))

SQLQuery8.sql - not connected

```
1 /*===== Script for SelectTopNRows command from SSMS =====*/
2 SELECT TOP (1000) [AssignmentID]
3   , [Description]
4   , [CompletedDate]
5   , [Status]
6   , [ApprovedBy]
7   FROM [AssignmentOrder].[dbo].[AssignmentHistory]
```

Results Messages

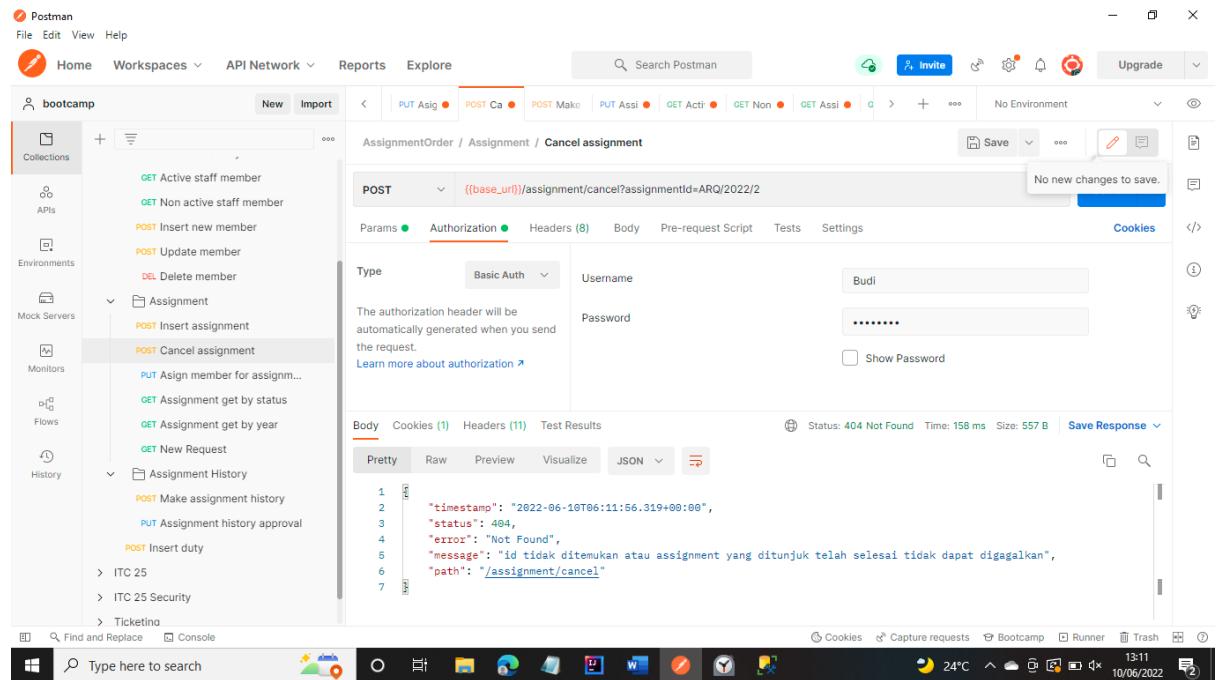
AssignmentID	Description	CompletedDate	Status	ApprovedBy
1 ARQ/2022/2	Perangkat sudah dipersiapkan dan ready 1 hr sebe...	2022-01-16	ON_TIME	C01

Query executed successfully.

LAPTOP-U114EHAT\MSQLSERVER1... | LAPTOP-U114EHAT\1315 (62) | master | 00:00:00 | 1 rows

Ready Type here to search

24°C 13:11 10/06/2022



## 6. Example native query usage

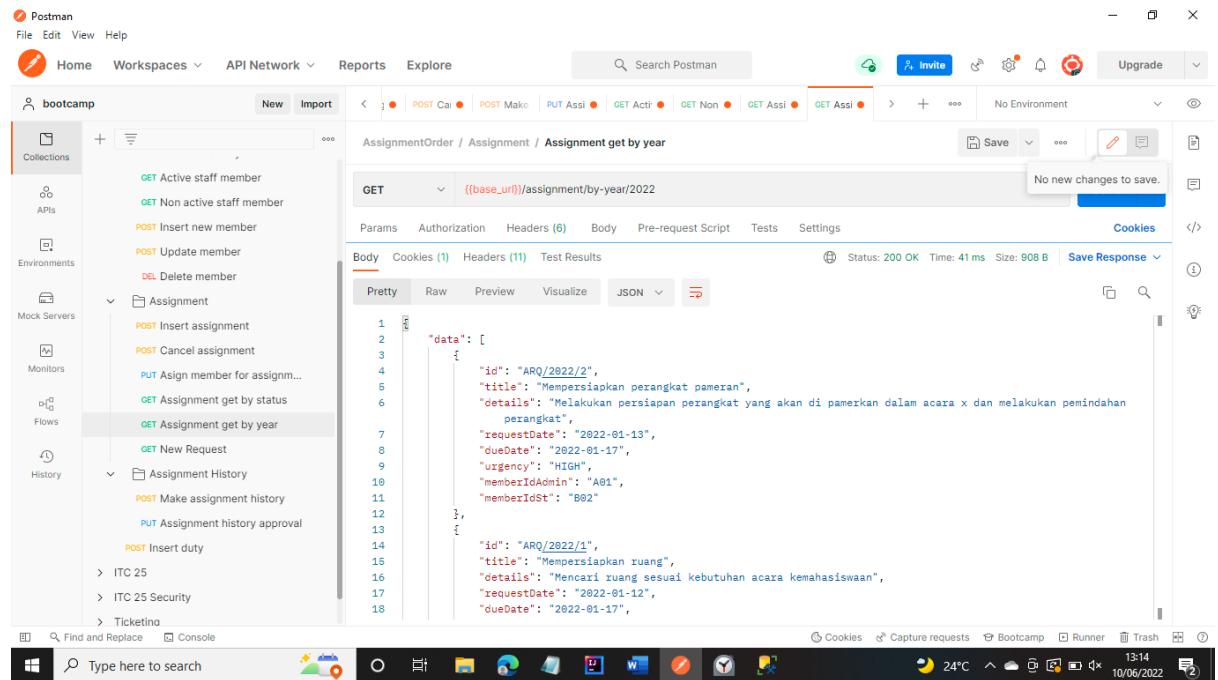
The screenshot shows an IntelliJ IDEA interface with the following details:

- Project Bar:** Shows the project structure with files like AssignmentorderApplication, AssignmentRepository, AssignmentHeaderDto, ApplicationSecurityCon...
- Code Editor:** Displays the `AssignmentRepository.java` file containing Java code for a JpaRepository interface. It includes two native queries: one for assignments by year and one for assignments by status.
- Run Tool Window:** Shows a database query being run against the `AssignmentorderApplication` database. The query is:

```
AssignmentorderApplication
  [USER] USER0_
    where
      user0_.UserID=?
```
- Bottom Status Bar:** Shows the message "Build completed successfully in 4 sec, 744 ms (36 minutes ago)" and the system status "24°C 13:12 10/06/2022".

The screenshot shows the Postman application interface. On the left sidebar, there are sections for Home, Workspaces, API Network, Reports, and Explore. The main workspace is titled "bootcamp". A search bar at the top right says "Search Postman". Below it, a toolbar includes "invite", "Capture requests", "Bootcamp", "Runner", and "Trash". The main content area displays an API endpoint for "Assignment get by status". The method is set to "GET" and the URL is "{{base\_url}}/assignment/by-status/canceled". The "Params" tab is selected, showing a single parameter "status" with the value "canceled". The "Body" tab is also visible. On the right side, there's a "No new changes to save." message and a "Cookies" section. The bottom part of the screen shows the response body in JSON format, which includes an array of assignments and a success message.

```
1 "data": [
2   {
3     "id": "ARQ/2022/1",
4     "title": "Mempersiapkan ruang",
5     "details": "Mencari ruang sesuai kebutuhan acara kemahasiswaan",
6     "requestDate": "2022-01-12",
7     "dueDate": "2022-01-17",
8     "urgency": "MEDIMUM",
9     "memberIdAdmin": "A01",
10    "memberIdSt": "B01"
11  },
12  ...
13 ],
14 "message": "Berhasil ditemukan",
```



## 7. Example Java stream usage

The image shows two screenshots illustrating the use of Java streams and their output.

**Top Screenshot (IDE):** A Java code editor showing a method named `toListStaffMember`. The code uses Java 8's Stream API to filter a list of members based on their duty ID. It then collects the results into a list and returns it. The code is part of a class named `MemberHeaderDto`.

```
public static List<MemberHeaderDto> toListStaffMember(List<Member> members) {
    List<MemberHeaderDto> result = new ArrayList<>();

    Stream<Member> memberStream = members.stream();
    Stream<Member> streamResult = memberStream.filter((member) ->{
        if (member.getDuty().getId().equals(2)) {
            return true;
        } else {
            return false;
        }
    });
    List<Member> listResult = streamResult.collect(Collectors.toList());

    for(var resulte: listResult){
        result.add(resulte);
    }
    return result;
}
```

**Bottom Screenshot (Postman):** A screenshot of the Postman application interface. On the left, the "Collections" sidebar shows a collection named "bootcamp" with a "Member" folder expanded, containing several API endpoints. One endpoint is selected: "GET Find all staff member". The "Body" tab shows a JSON response with three data objects:

```

"data": [
  {
    "firstName": "David",
    "lastName": "Yusno",
    "dutyId": 2
  },
  {
    "firstName": "Ricky",
    "lastName": "",
    "dutyId": 2
  },
  {
    "firstName": "Ridwan",
    "lastName": "Hilmansan",
    "dutyId": 2
  },
  {
    "firstName": "Dody"
  }
]
```

## 8. Penggunaan login dengan otoritas berbeda

- Membuat user

The screenshot shows the Microsoft SQL Server Management Studio interface. In the Object Explorer, the 'Tables' node is expanded, showing various system and user-defined tables. In the center pane, a query window displays the following T-SQL code:

```
1 /***** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [UserID]
3     ,[Username]
4     ,[Password]
5     ,[Enabled]
6     ,[Role]
7  FROM [AssignmentOrder].[dbo].[User]
```

The results pane shows a table with three rows of data:

UserID	Username	Password	Enabled	Role
A01	Budi	\$2a\$10\$Wxacr2aoJe64kYTEa25KwO/PfdGPqFgmGRM4g...	1	ADMIN
B01	David	\$2a\$10\$9xePnYd1MhUV98AzTewhQ5c5dwF77ExkxRdpOk...	1	STAFF_MEMBER
C01	Fatmah	\$2a\$10\$oiLDIBdG17BCxLMbKuCobb6KRIEVziDbxOMNAK75...	1	CHAIRMAN

Below the results, a message indicates: "Query executed successfully."

The screenshot shows the Postman application interface. On the left, the 'bootcamp' collection is selected, and under 'AssignmentOrder', the 'Auth' folder is expanded, showing 'POST Register user' and 'GET Auth'. The 'POST Register user' request is selected. The 'Body' tab shows the following JSON payload:

```
1 {
2   "username": "Ricky",
3   "password": "bootcamp"
4 }
```

The response tab shows a successful 200 OK status with the following JSON data:

```
1 {
2   "data": true,
3   "message": "user account berhasil dibuat",
4   "status": "201"
5 }
```

SQLQuery15.sql - LAPTOP-U114EHAT\SQLSERVER1.AssignmentOrder (LAPTOP-U114EHAT\1315 (72)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

AssignmentOrder Execute

Object Explorer

Tables System Tables FileTables External Tables Graph Tables dbo.Assignment dbo.AssignmentHistory dbo.Duty dbo.Member dbo.User Views External Resources Synonyms Programmability Service Broker Storage Security

Atlas BasiliskSpringTF GirlFlower It25 Kampus MarketPlace Northwind SecurityOneRole TicketingSystem Unicorn Winterhold Security

SQLQuery15.sql - L..114EHAT\1315 (72) SQLQuery14.sql - L..114EHAT\1315 (62) SQLQuery11.sql - L..114EHAT\1315 (61) SQLQuery13.sql - L..114EHAT\1315 (74)

```
1 /***** Script for SelectTopNRows command from SSMS *****/
2 SELECT TOP (1000) [UserID]
3     ,[Username]
4     ,[Password]
5     ,[Enabled]
6     ,[Role]
7     FROM [AssignmentOrder].[dbo].[User]
```

Results Messages

	UserID	Username	Password	Enabled	Role
1	A01	Budi	\$2a\$10\$Wxacr2aoJe64kYTEs25KwO/Pfd.GPqFgmGRM4g/...	1	ADMIN
2	B01	David	\$2a\$10\$9xePnq1dVuV98AzTewhQ5c5vwF77ExIxRpdpOk...	1	STAFF_MEMBER
3	B02	Ricky	\$2a\$10\$gJW6quvKMV.TqFHQcA/eo22nNg/TnIoT7NhLbgK...	1	STAFF_MEMBER
4	C01	Fatimah	\$2e\$10\$loLDIBdG7BCxLMbKuCibb6KRIEVziDbxOWNAK6757...	1	CHAIRMAN

Query executed successfully.

LAPTOP-U114EHAT\SQLSERVER1 | LAPTOP-U114EHAT\1315 (72) | AssignmentOrder | 00:00:00 | 4 rows

Ready Type here to search

LN 1 Col 1 Ch 1 INS

24°C 13:20 10/06/2022

- Mengecek otoritas user

The screenshot shows the Postman interface with a collection named "bootcamp". In the "Auth" folder, there is a "GET Auth" request. The "Authorization" tab is selected, showing "Basic Auth" with "Username" set to "Budi" and "Password" set to "\*\*\*\*\*". The "Body" tab shows a JSON response:

```

1
2   "authorities": [
3     {
4       "authority": "ROLE_ADMIN"
5     }
6   ],
7   "details": {
8     "remoteAddress": "0:0:0:0:0:0:0:1",
9     "sessionId": "915E428C620C269846AD3B7B4C4B68F6"

```

The status bar at the bottom indicates "Status: 200 OK Time: 55 ms Size: 779 B".

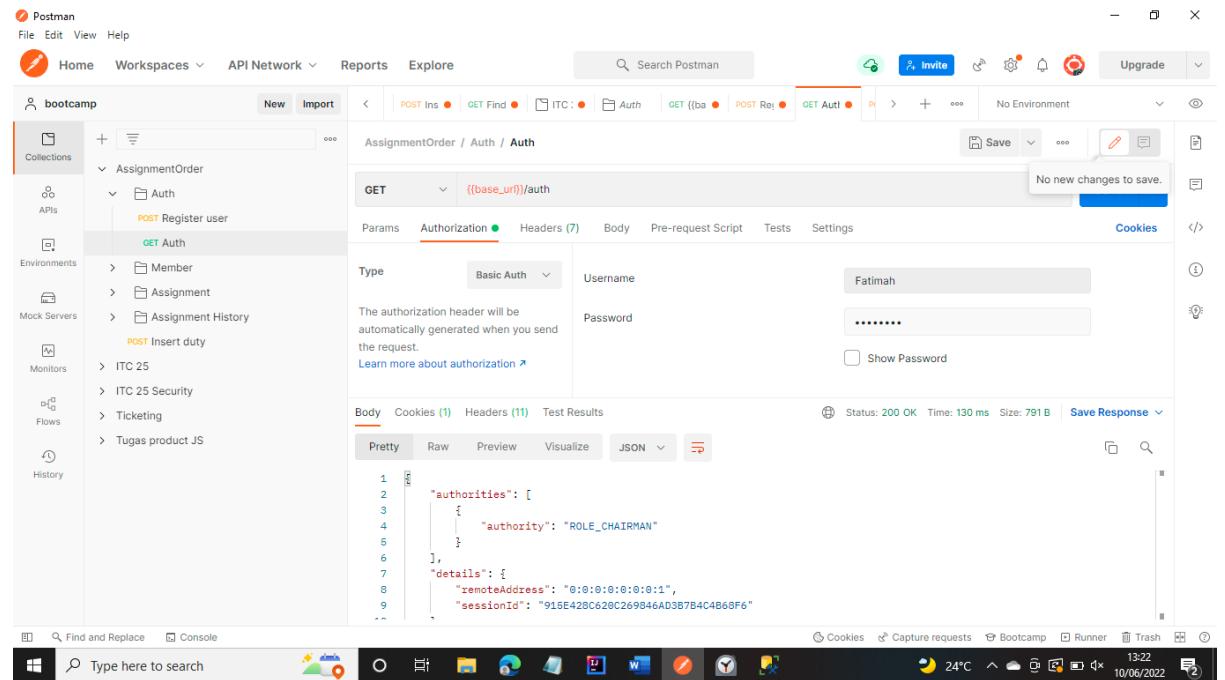
The screenshot shows the Postman interface with a collection named "bootcamp". In the "Auth" folder, there is a "GET Auth" request. The "Authorization" tab is selected, showing "Basic Auth" with "Username" set to "David" and "Password" set to "\*\*\*\*\*". The "Body" tab shows a JSON response:

```

1
2   "authorities": [
3     {
4       "authority": "ROLE_STAFF_MEMBER"
5     }
6   ],
7   "details": {
8     "remoteAddress": "0:0:0:0:0:0:0:1",
9     "sessionId": "915E428C620C269846AD3B7B4C4B68F6"

```

The status bar at the bottom indicates "Status: 200 OK Time: 125 ms Size: 795 B".



- Percobaan fungsi aplikasi dengan user berbeda

Postman interface showing a successful GET request to `((base_url))/auth`. The response body is:

```

1
2   "authorities": [
3     {
4       "authority": "ROLE_CHAIRMAN"
5     }
6   ],
7   "details": {
8     "remoteAddress": "0:0:0:0:0:0:0:1",
9     "sessionId": "915E428C628C269846AD3B7B4C4B68F6"

```

Postman interface showing a failed POST request to `((base_url))/member/insert`. The response body is:

```

1
2   "timestamp": "2022-06-10T06:23:39.366+00:00",
3   "status": 403,
4   "error": "Forbidden",
5   "message": "Forbidden",
6   "path": "/member/insert"

```

Postman

File Edit View Help

Home Workspaces API Network Reports Explore

AssignmentOrder / Member / Insert new member

POST {{base\_url}}/member insert

Type Basic Auth Username Fatimah

The authorization header will be automatically generated when you send the request.

Body Cookies (1) Headers (11) Test Results

```

1 "timestamp": "2022-06-10T06:23:49.894+00:00",
2 "status": 403,
3 "error": "Forbidden",
4 "message": "Forbidden",
5 "path": "/member/insert"
6
7
  
```

Body Raw Preview Visualize JSON

Body Cookies (1) Headers (11) Test Results

Status: 403 Forbidden Time: 124 ms Size: 477 B Save Response

Find and Replace Console

Windows Taskbar: Type here to search, Start button, File Explorer, Mail, Photos, Videos, Task View, Taskbar icons, 13:23, 24°C, 10/06/2022

SQLQuery15.sql - LAPTOP-U114EHAT\MSQLSERVER1.AssignmentOrder (LAPTOP-U114EHAT\1315 (72)) - Microsoft SQL Server Management Studio

File Edit View Query Project Tools Window Help

Object Explorer

Tables System Tables FileTables External Tables Graph Tables dbo.Assignment dbo.AssignmentHistory dbo.Duty dbo.Member dbo.User Views External Resources Synonyms Programmability Service Broker Storage Security

SQLQuery15.sql - L...114EHAT\1315 (72) SQLQuery14.sql - L...114EHAT\1315 (62) SQLQuery11.sql - L...114EHAT\1315 (61) SQLQuery13.sql - L...114EHAT\1315 (74)

```

1 /*===== Script for SelectTopNRows command from SSMS =====*/
2 SELECT TOP (1000) [UserID]
3   ,[Username]
4   ,[Password]
5   ,[Enabled]
6   ,[Role]
7  FROM [AssignmentOrder].[dbo].[User]
  
```

Results Messages

	UserID	Username	Password	Enabled	Role
1	A01	Budi	\$2a\$10\$Wxacr2eJe64kYTEa25KwO/PfdGPaLPqFgmGRM4g/...	1	ADMIN
2	B01	David	\$2a\$10\$8/xPrnj1dVfu/V998AzTewQ85c3vwF77.EY1xRpdOk...	1	STAFF_MEMBER
3	B02	Ricky	\$2a\$10\$quW6quvvKMV.TqFHQcA/eO2nuN6/TnIoT7BhLbgK...	1	STAFF_MEMBER
4	C01	Fatimah	\$2a\$10\$loLDIBtG17BCxLMbKuCibb6KRIEVzIDbxOVNAk757...	1	CHAIRMAN

Query executed successfully.

LAPTOP-U114EHAT\MSQLSERVER1 LAPTOP-U114EHAT\1315 (72) AssignmentOrder 00:00:00 | 4 rows

Windows Taskbar: Type here to search, Start button, File Explorer, Mail, Photos, Videos, Task View, Taskbar icons, 13:24, 24°C, 10/06/2022