


PRAKTIKUM BASIS DATA

BAB	: MENAMPILKAN DATA DARI BANYAK TABEL	
NAMA	: DANI ADRIAN	
NIM	: 225150201111009	
ASISTEN	: NATHAN DAUD	
	RAKHA HANIF MAHESWARA	
	NAUFAL PUTRA SUTRISNA	
	STANISLAUS FRANS BERNADO	
TGL PRAKTIKUM	: 18/10/2023	TGL PENGUMPULAN : 19/10/2023

Pertanyaan

1. Tampilkan semua nama *student* beserta nama *department*.

Implementasi

	<pre>USE DBSS_009 SELECT student.name, department.dept_name FROM student, department WHERE student.dept_name = department.dept_name</pre>
	<pre>USE DBSS_009 SELECT student.name, department.dept_name FROM student JOIN department ON student.dept_name = department.dept_name</pre>

Tampilan Keluaran

File Edit View Query Project Tools Window Help

DBSS_009 Execute

Object Explorer

Connect

LAPTOP-3UB09HRP (SQL Server 16.0.1105.1 - sa)

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SQLQuery4.sql - LA...DBSS_009 (sa (68))* DML_largeRelations...DBSS_009 (sa (60))

```
1 USE DBSS_009
2
3 SELECT student.name, department.dept_name
4 FROM student, department
5 WHERE student.dept_name = department.dept_name
6
```

121 %

Results Messages

	name	dept_name
1	Manber	Civil Eng.
2	Zelty	Mech. Eng.
3	Duan	Civil Eng.
4	Colin	Civil Eng.
5	Mediratta	Geology
6	Rzecz	Comp. Sci.
7	Hilberg	Psychology
8	Ugarte	Pol. Sci.
9	Grosch	Astronomy
10	Kieras	Physics
11	Reed	English
12	Okaf	Geology
13	Zabary	Statistics
14	Shabuno	Math
15	Terauchi	Physics
16	Allard	Physics
17	Veselov...	Elec. Eng.
18	Dhav	Biology
19	Xue	Languages
20	Waks	Elec. Eng.
21	More	Geology
22	Marlet	Accounting
23	Roses	Accounting
24	Jerns	History
25	Morales	Cybernetics
26	Amoux	Geology
27	Robinson	Marketing
28	Prasad	Pol. Sci.

Dani Adrian.txt

File Edit View

Dani Adrian
225150201111009

Ln 1, Col 1 100% Windows (CRLF)

Query executed successfully.

Ready Ln 4

The screenshot shows the Microsoft SQL Server Enterprise Manager interface. The Object Explorer on the left displays the database structure of 'DBSS_009', including tables like 'student' and 'department'. The SQL query window shows the following query:

```

1 USE DBSS_009
2
3 SELECT student.name, department.dept_name
4 FROM student JOIN department
5 ON student.dept_name = department.dept_name
6

```

The Results window shows the output of the query, listing 28 students and their departments. The first row is highlighted:

name	dept_name
Manber	Civil Eng.
Zelly	Mech. Eng.
Duan	Civil Eng.
Colin	Civil Eng.
Mediratta	Geology
Rzecz	Comp. Sci.
Hilberg	Psychology
Ugarte	Pol. Sci.
Grosch	Astronomy
Kieras	Physics
Reed	English
Okaf	Geology
Zabary	Statistics
Shabuno	Math
Terauchi	Physics
Allard	Physics
Veselovsky	Elec. Eng.
Dhav	Biology
Xue	Languages
Waks	Elec. Eng.
More	Geology
Marlet	Accounting
Roses	Accounting
Jerns	History
Morales	Cybernetics
Arnoux	Geology
Robinson	Marketing
Prasad	Pol. Sci.

A text editor window titled 'Dani Adrian.txt' shows the output for the first row:

```

Dani Adrian
225150201111009

```

The status bar at the bottom indicates 'Query executed successfully.'

Pembahasan dan Analisis

Nama : Dani Adrian

NIM : 225150201111009

Untuk menampilkan semua nama student beserta departmentnya, dapat dilakukan menggunakan equi-join untuk menggabungkan dua tabel yaitu student dan department berdasarkan dept_name yang sama antara kedua tabel.

Penggunaan equi-join sama seperti Cartesian Product. Bentuk ini digunakan ketika dua tabel digabungkan berdasarkan kesamaan kolom yang telah ditentukan.

Selain menggunakan equi-join, untuk menampilkan semua nama student beserta department-nya, dapat juga dilakukan menggunakan perintah SELECT FROM dan perintah JOIN ON agar tabel student dan department digabungkan

Pertanyaan

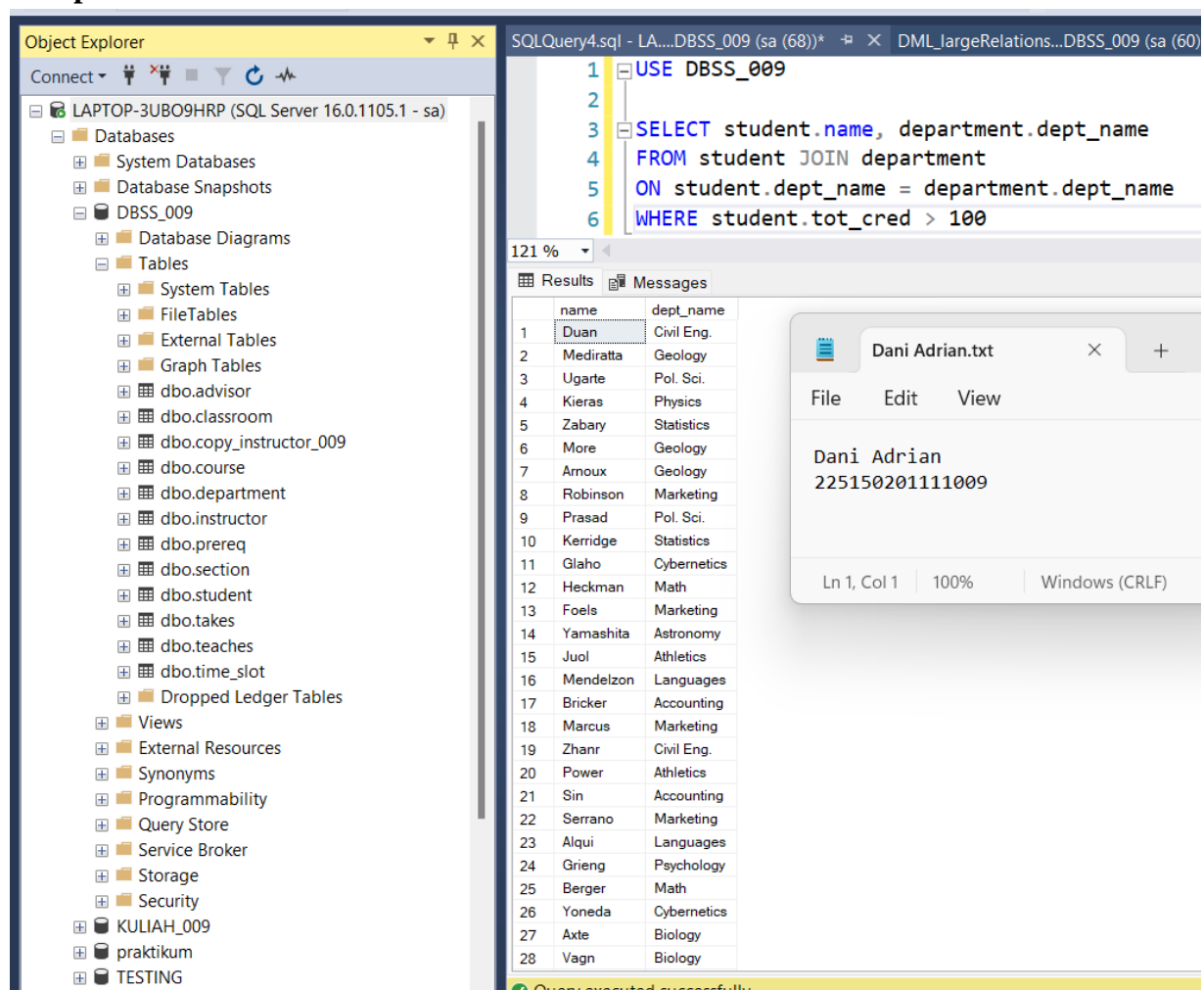
2. Tampilkan semua nama *student* beserta nama *department* yang memiliki total SKS (*total credit*) lebih dari 100.

Implementasi

```
USE DBSS_009

SELECT student.name, department.dept_name
FROM student JOIN department
ON student.dept_name = department.dept_name
WHERE student.tot_cred > 100
```

Tampilan Keluaran



The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'LAPTOP-3UBO9HRP (SQL Server 16.0.1105.1 - sa)'. The central pane shows the SQL query being executed in the 'SQLQuery4.sql' file. The query is as follows:

```
1 USE DBSS_009
2
3 SELECT student.name, department.dept_name
4 FROM student JOIN department
5 ON student.dept_name = department.dept_name
6 WHERE student.tot_cred > 100
```

The 'Results' pane shows the output of the query, which is a table with two columns: 'name' and 'dept_name'. The table contains 28 rows of data, starting with 'Duan' in 'Civil Eng.' and ending with 'Vagn' in 'Biology'. A status bar at the bottom indicates 'Query executed successfully'.

name	dept_name
Duan	Civil Eng.
Mediratta	Geology
Ugarte	Pol. Sci.
Kieras	Physics
Zabary	Statistics
More	Geology
Arnoux	Geology
Robinson	Marketing
Prasad	Pol. Sci.
Kerridge	Statistics
Glaho	Cybernetics
Heckman	Math
Foels	Marketing
Yamashita	Astronomy
Juol	Athletics
Mendelzon	Languages
Bricker	Accounting
Marcus	Marketing
Zhanr	Civil Eng.
Power	Athletics
Sin	Accounting
Serrano	Marketing
Alqui	Languages
Grieng	Psychology
Berger	Math
Yoneda	Cybernetics
Axte	Biology
Vagn	Biology

Pembahasan dan Analisis

Nama : Dani Adrian

NIM : 225150201111009

Untuk menampilkan semua nama student beserta nama department yang memiliki total SKS (total Credit) lebih dari 100, dapat dilakukan menggunakan perintah SELECT FROM dan perintah JOIN ON agar tabel student dan department digabungkan berdasarkan dept_name yang sama. Kemudian tambahkan perintah WHERE untuk mengambil data yang hanya memiliki kondisi tot_cred lebih dari 100

Pertanyaan

3. Tampilkan nama *student* dan nama *instructor* yang bekerja pada *department* yang sama.

Implementasi

```
USE DBSS_009
```

```
SELECT student.name AS student_name, instructor.name AS  
instructor_name  
FROM student JOIN instructor  
ON student.dept_name = instructor.dept_name
```

Tampilan Keluaran

The screenshot displays the SQL Server Enterprise Manager interface. On the left, the Object Explorer shows the database structure for 'LAPTOP-3UBO9HRP (SQL Server 16.0.1105.1 - sa)'. The central pane shows the SQL Query window with the following query:

```
1 USE DBSS_009  
2  
3 SELECT student.name AS student_name, instructor.name AS instructor_name  
4 FROM student JOIN instructor  
5 ON student.dept_name = instructor.dept_name
```

The Results pane shows the output of the query, which is a table with two columns: 'student_name' and 'instructor_name'. The table contains 29 rows of data, listing names of students and instructors who share the same department.

On the right, a text editor window titled 'Dani Adrian.txt' is open, displaying the following text:

```
Dani Adrian  
225150201111009
```

Pembahasan dan Analisis

Nama : Dani Adnan

NIM : 225150201111009

Untuk menampilkan semua nama student dan nama instructor yang bekerja pada department yang sama, dapat dilakukan menggunakan perintah SELECT FROM dan perintah JOIN ON agar tabel student dan instructor digabung berdasar dept_name yang sama