

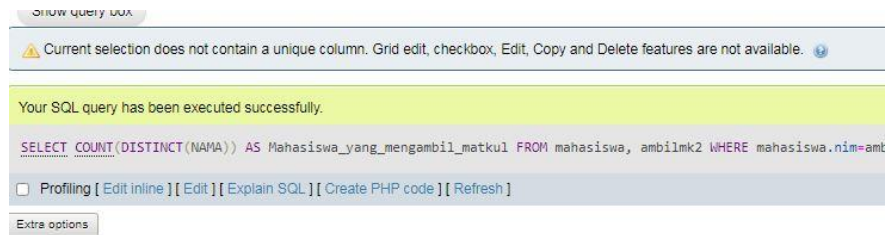
Tugas DB Implementasi

Nama : Muhamad Haekal Rizky

Kelas : SI-A

Matkul : DB Implementasi

Tugas praktikum :



Mahasiswa_yang_mengambil_matkul

3

1. Implisit



Explisit



2.

3. Explicit

Show query box

⚠️ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

✅ Showing rows 0 - 3 (4 total, Query took 0.0010 seconds.)

```
SELECT mahasiswa.nim, nama, matakuliah.kode_mk, nama_mk FROM mahasiswa INNER JOIN (matakuliah INNER JOIN ambilmk2 ON matakuliah.kode_mk = ambilmk2.kode_mk) ON mahasiswa.nim = ambilmk2.NIM;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

nim	nama	kode_mk	nama_mk
101	Arif	PT1447	Praktikum Basis Data
104	Ika	PT1447	Praktikum Basis Data
104	Ika	PT1333	Basis Data Terdistribusi
103	Wati	TIK333	Sistem Operasi

3. Implicit

Show query box

⚠️ Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

✅ Showing rows 0 - 3 (4 total, Query took 0.0000 seconds.)

```
SELECT mahasiswa.nim, nama, matakuliah.kode_mk, nama_mk FROM mahasiswa, matakuliah, ambilmk2 WHERE matakuliah.kode_mk = ambilmk2.kode_mk AND mahasiswa.nim = ambilmk2.NIM;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

nim	nama	kode_mk	nama_mk
101	Arif	PT1447	Praktikum Basis Data
104	Ika	PT1447	Praktikum Basis Data
104	Ika	PT1333	Basis Data Terdistribusi
103	Wati	TIK333	Sistem Operasi

4.

Show query box

✅ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0010 seconds.)

```
SELECT mahasiswa.nim, NAMA, SUM(sks) AS jumlah_sks FROM mahasiswa INNER JOIN (matakuliah INNER JOIN ambilmk2 ON matakuliah.kode_mk = ambilmk2.kode_mk) ON mahasiswa.nim = ambilmk2.NIM GROUP BY NAMA HAVING SUM(sks) > 4 AND SUM(sks) < 10;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

nim	NAMA	jumlah_sks
104	Ika	5

5.

✅ Showing rows 0 - 3 (4 total, Query took 0.0010 seconds.)

```
SELECT matakuliah.kode_mk, nama_mk, sks, semester FROM matakuliah LEFT OUTER JOIN (mahasiswa LEFT OUTER JOIN ambilmk2 ON mahasiswa.nim = ambilmk2.NIM) ON matakuliah.kode_mk = ambilmk2.kode_mk WHERE mahasiswa.nim IS NULL;
```

☐ Profiling [\[Edit inline \]](#) [\[Edit \]](#) [\[Explain SQL \]](#) [\[Create PHP code \]](#) [\[Refresh \]](#)

☐ Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

kode_mk	nama_mk	sks	semester
TIK342	Praktikum Basis Data	1	3
TIK123	Jaringan Komputer	2	5
PTI123	Grafika Multimedia	3	5

Tugas Rumah :

1.

A. Tampilkan kd_mk dan mata kuliah yang jumlah mahasiswanya 40

The screenshot shows the phpMyAdmin interface with a query executed on the 'ambil_mk' table. The query filters for courses where the number of students (jml_mhs) is 40. The result shows two rows: PT101 (Algoritma dan Pemrograman) and PT103 (Visual Basic).

```
SELECT ambil_mk.kd_mk, nama_mk, jml_mhs FROM matakuliah INNER JOIN  
ambil_mk ON matakuliah.kode_mk = ambil_mk.kd_mk WHERE jml_mhs=40;
```

kd_mk	nama_mk	jml_mhs
PT101	Algoritma dan Pemrograman	40
PT103	Visual Basic	40

B. Tampilkan data Instruktur yang mengajarkan Basis Data

The screenshot shows the phpMyAdmin interface with a query executed on the 'instruktur' table. The query filters for instructors who teach 'Basis Data'. The result shows one row: Saichul Fitriana A. Ilmu Komputer Malang.

```
SELECT instruktur.NIP, nama_ins, jurusan, asal_kota, nama_mk FROM  
instruktur INNER JOIN (matakuliah INNER JOIN ambil_mk ON  
matakuliah.kode_mk = ambil_mk.kd_mk) ON instruktur.NIP = ambil_mk.NIP  
WHERE nama_mk = "Basis Data";
```

NIP	nama_ins	jurusan	asal_kota	nama_mk
2	Saichul Fitriana A.	Ilmu Komputer	Malang	Basis Data

C. Tampilkan data Instruktur yang tidak mengajar

The screenshot shows the phpMyAdmin interface with a query executed on the 'instruktur' table. The query filters for instructors who do not teach any courses. The result shows one row: Budy Pratama Ilmu Komputer Magelang.

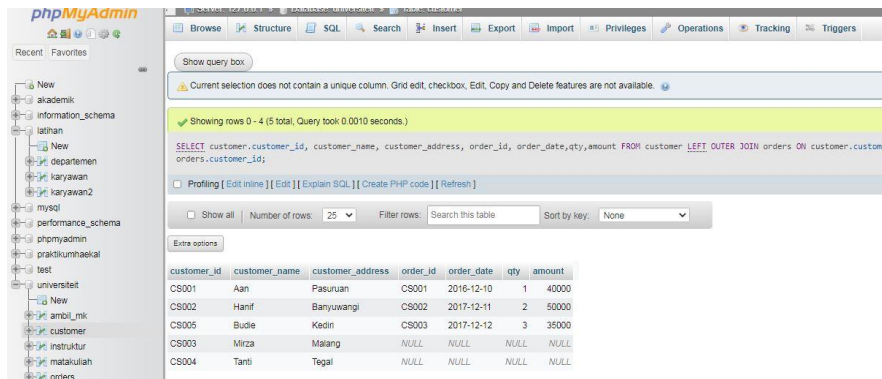
```
SELECT instruktur.NIP, nama_ins, jurusan, asal_kota FROM instruktur  
LEFT OUTER JOIN ambil_mk ON instruktur.NIP = ambil_mk.NIP WHERE  
ambil_mk.NIP IS NULL;
```

NIP	nama_ins	jurusan	asal_kota
4	Budy Pratama	Ilmu Komputer	Magelang

2.

A. Gabungkan kedua tabel tersebut dengan join dan union

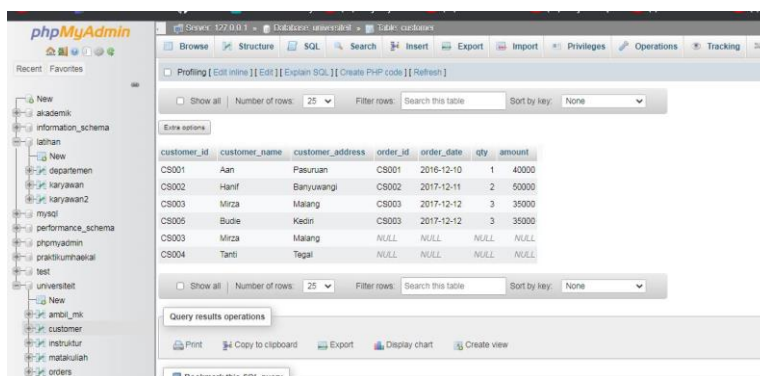
>> Join



The screenshot shows the phpMyAdmin interface with a SQL query executed. The query is: `SELECT customer.customer_id, customer_name, customer_address, order_id, order_date, qty, amount FROM customer LEFT OUTER JOIN orders ON customer.customer_id=orders.customer_id;` The result shows 5 rows, including customers with no orders (NULL values for order_id, order_date, qty, and amount).

customer_id	customer_name	customer_address	order_id	order_date	qty	amount
CS001	Aan	Pasuruan	CS001	2016-12-10	1	40000
CS002	Hanif	Banyuwangi	CS002	2017-12-11	2	50000
CS005	Budie	Kedin	CS003	2017-12-12	3	35000
CS003	Mirza	Malang	NULL	NULL	NULL	NULL
CS004	Tanti	Tegal	NULL	NULL	NULL	NULL

>> Union



The screenshot shows the phpMyAdmin interface with a SQL query executed. The query is: `SELECT customer_id, customer_name, customer_address, order_id, order_date, qty, amount FROM customer UNION SELECT order_id, order_date, qty, amount FROM orders;` The result shows 8 rows, combining data from both tables. The last four rows have NULL values for customer_id, customer_name, and customer_address.

customer_id	customer_name	customer_address	order_id	order_date	qty	amount
CS001	Aan	Pasuruan	CS001	2016-12-10	1	40000
CS002	Hanif	Banyuwangi	CS002	2017-12-11	2	50000
CS003	Mirza	Malang	CS003	2017-12-12	3	35000
CS005	Budie	Kedin	CS003	2017-12-12	3	35000
CS003	Mirza	Malang	NULL	NULL	NULL	NULL
CS004	Tanti	Tegal	NULL	NULL	NULL	NULL
NULL	NULL	NULL	CS001	2016-12-10	1	40000
NULL	NULL	NULL	CS002	2017-12-11	2	50000