PRACTICUM DYNAMIC WEB

MODUL 4

DYNAMIC WEB

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INFORMATION TECHNOLOGY

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Percobaan 1

SQL

Run SQL query/queries on server “127.0.0.1”:

```
1 CREATE DATABASE Informatika
```

Percobaan 2

SQL

Run SQL query/queries on database informatika:

```
1 CREATE TABLE mahasiswa(
2     nim CHARACTER(10) PRIMARY KEY NOT NULL,
3     nama CHARACTER(50) NULL,
4     kelas CHARACTER(50) NULL,
5     alamat CHARACTER(50) NULL);
```

Result

Show query box

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0919 seconds.)

```
CREATE TABLE mahasiswa( nim CHARACTER(10) PRIMARY KEY NOT NULL, nama CHARACTER(50) NULL, kelas CHARACTER(50) NULL, alamat CHARACTER(50) NULL)
```

Percobaan 3

SQL

Run SQL query/queries on table informatika.mahasiswa:

```
1 INSERT INTO `mahasiswa`(`nim`, `nama`, `kelas`, `alamat`) VALUES ("L200180001", "Ari Wibowo", "A", "Solo");
```

Result

Show query box

1 row inserted. (Query took 0.0159 seconds.)

```
INSERT INTO `mahasiswa`(`nim`, `nama`, `kelas`, `alamat`) VALUES ("L200180001", "Ari Wibowo", "A", "Solo")
```

SQL

Run SQL query/queries on table informatika.mahasiswa:

```
1 INSERT INTO `mahasiswa`(`nim`, `nama`, `kelas`) VALUES ("L200180080", "Agustina", "B")
```

Result

Show query box

1 row inserted. (Query took 0.0158 seconds.)

```
INSERT INTO `mahasiswa`(`nim`, `nama`, `kelas`) VALUES ("L200180080", "Agustina", "B")
```

Showing rows 0 - 1 (2 total, Query took 0.0022 seconds.)

```
SELECT * FROM `mahasiswa`
```

Show all | Number of rows: 25

+ Options

	nim	nama	kelas	alamat
Edit Copy Delete	L200180001	Ari Wibowo	A	Solo
Edit Copy Delete	L200180080	Agustina	B	*NULL*

Percobaan 4

SQL

Run SQL query/queries on table informatika.mahasiswa:

```
1 UPDATE `mahasiswa` SET nama="Agustina Anggraini" WHERE nama="Agustina"
```

Result

Show query box

1 row affected. (Query took 0.0139 seconds.)

```
UPDATE `mahasiswa` SET nama="Agustina Anggraini" WHERE nama="Agustina"
```

```
SELECT * FROM `mahasiswa`
```

Show all | Number of rows: 25

+ Options

	nim	nama	kelas	alamat
Edit Copy Delete	L200180001	Ari Wibowo	A	Solo
Edit Copy Delete	L200180080	Agustina Anggraini	B	*NULL*

Percobaan 5

SQL

```
SELECT * FROM `nilai`
```

Show all | Number of rows: 25

+ Options

	NIM	Nama_MK	Nilai_Angka	Nilai_Huruf
Edit Copy Delete	L200180002	Kapita Selekta	60	B
Edit Copy Delete	L200180010	Pemrograman Web	87	A
Edit Copy Delete	L200180080	Pemrograman Web	90	A

Result

Show query box

Showing rows 0 - 0 (1 total, Query took 0.0101 seconds.)

```
SELECT Mahasiswa.NIM, Mahasiswa.Nama, Nilai.Nama_MK, Nilai.Nilai_Angka, Nilai.Nilai_Huruf FROM (Mahasiswa JOIN Nilai ON Mahasiswa.NIM=Nilai.NIM)
```

Show all | Number of rows: 25

+ Options

NIM	Nama	Nama_MK	Nilai_Angka	Nilai_Huruf
L200180080	Agustina Anggraini	Pemrograman Web	90	A

Percobaan 6

SQL & RESULT

Showing rows 0 - 1 (2 total, Query took 0.0106 seconds.)

```
SELECT Mahasiswa.NIM, Mahasiswa.Nama, Nilai.Nama_MK, Nilai.Nilai_Angka, Nilai.Nilai_Huruf FROM (Mahasiswa LEFT JOIN Nilai ON Mahasiswa.NIM=Nilai.NIM)
```

Show all | Number of rows: 25

+ Options

NIM	Nama	Nama_MK	Nilai_Angka	Nilai_Huruf
L200180001	Ari Wibowo	*NULL*	*NULL*	*NULL*
L200180080	Agustina Anggraini	Pemrograman Web	90	A

Percobaan 7

SQL & Result

Showing rows 0 - 2 (3 total, Query took 0.0060 seconds.)

```
SELECT Mahasiswa.NIM, Mahasiswa.Nama, Nilai.Nama_MK, Nilai.Nilai_Angka, Nilai.Nilai_Huruf FROM (Mahasiswa RIGHT JOIN Nilai ON Mahasiswa.NIM=Nilai.NIM)
```

Show all | Number of rows: 25

+ Options

NIM	Nama	Nama_MK	Nilai_Angka	Nilai_Huruf
NULL	*NULL*	Kapita Selekta	60	B
NULL	*NULL*	Pemrograman Web	87	A
L200180080	Agustina Anggraini	Pemrograman Web	90	A

Percobaan 8

SQL & Result

```
SELECT AVG(Nilai_Angka) AS "Rata-Rata Nilai" FROM Nilai
```

Show all | Number of rows: 25

+ Options

Rata-Rata Nilai
79.0000

Percobaan 9

SQL & Result

```
SELECT SUM(Nilai_Angka) AS "Total Nilai" FROM Nilai
```

Show all | Number of rows: 25

+ Options

Total Nilai
237

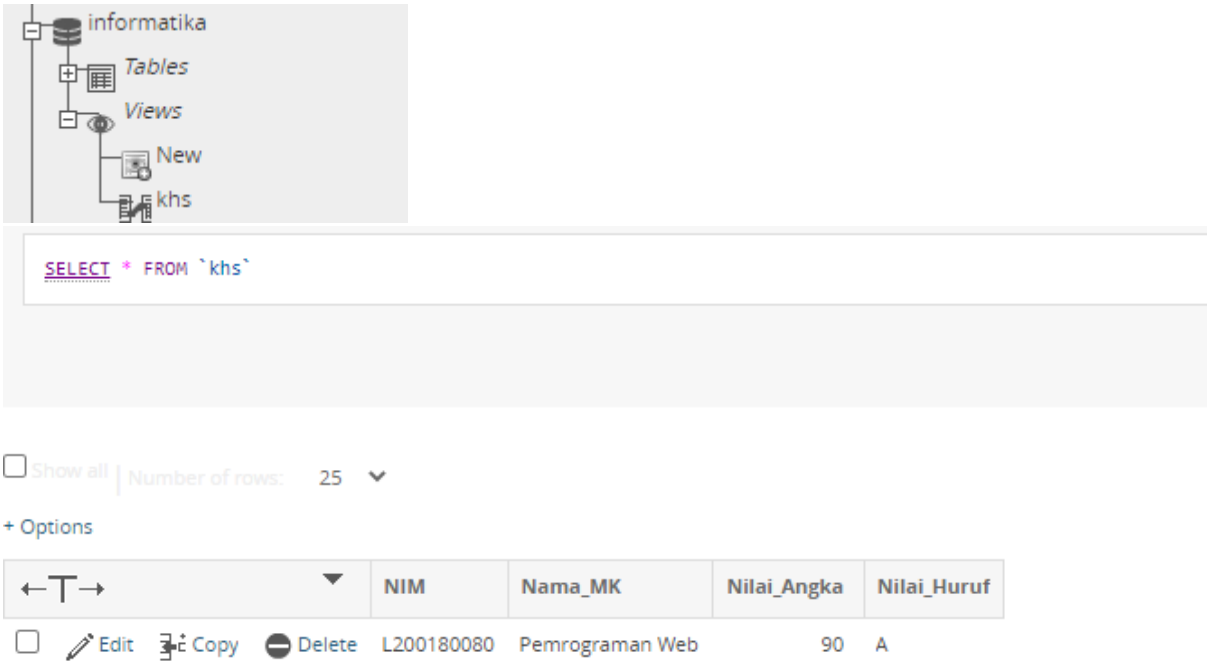
Percobaan 10

SQL & Result

Run SQL query/queries on table informatika.Nilai:

```
1 CREATE VIEW KHS AS SELECT Mahasiswa.NIM, Nilai.Nama_MK, Nilai.Nilai_Angka, Nilai.Nilai_Huruf FROM (Mahasiswa
  INNER JOIN Nilai ON Mahasiswa.NIM=Nilai.NIM)
```

Result



TUGAS

1. What is the function of these?
   - **SELECT**
     Use to selecting data in a table
   - **JOIN**
     JOIN is a command to show all data that has a same value.
   - **LEFT JOIN**
     LEFT JOIN is one way to connect table and show all the data (LEFT) in table that has no connection, while the empty data will be NULL.
   - **RIGHT JOIN**
     RIGHT JOIN is almost same as LEFT JOIN but in reverse, while RIGHT JOIN will join table and show all the data (RIGHT) in table that has no connection, while the empty data will be NULL.
   - **AVG**
     Use to calculate the average value in a column that is inside a table in database.
   - **SUM**
     Use to calculate the total value in a column that is inside a table in database.

2. Write a SQL Syntax to fill the address of NIM L200180080

(Initial State)

SQL

Run SQL query/queries on table informatika.mahasiswa:

```
1 UPDATE `mahasiswa` SET `alamat`="Sragen" WHERE nim="L200180080"
```

Result

Show query box

1 row affected. (Query took 0.0109 seconds.)

```
UPDATE `mahasiswa` SET `alamat`="Sragen" WHERE nim="L200180080"
```

```
SELECT * FROM `mahasiswa`
```

Show all | Number of rows: 25

+ Options

		nim	nama	kelas	alamat
	Edit Copy Delete	L200180001	Ari Wibowo	A	Solo
	Edit Copy Delete	L200180080	Agustina Anggraini	B	Sragen