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Assignment 4 - Data Manipulation Languages 2

Create database with the following student table data:

1. Create database

```
MySQL returned an empty result set (i.e. zero rows). (Query took 0.0005 seconds.)

CREATE DATABASE IF NOT EXISTS university;

[ Edit inline ] [ Edit ] [ Create PHP code ]
```

2. Create Table with attributes

```
1 USE university;
2
3 CREATE TABLE IF NOT EXISTS student(
4     number INT NOT NULL,
5     NIM INT PRIMARY KEY AUTO_INCREMENT NOT NULL,
6     name VARCHAR(255) NOT NULL,
7     cityAddress VARCHAR(100),
8     age INT(25),
9     IPK DECIMAL(2,1) NOT NULL,
10    department VARCHAR(100) NULL
11 ) AUTO_INCREMENT = 12345, ENGINE=INNODB;
```

```
MySQL returned an empty result set (i.e. zero rows). (Query took 0.0004 seconds.)

USE university;

[ Edit inline ] [ Edit ] [ Create PHP code ]

MySQL returned an empty result set (i.e. zero rows). (Query took 0.0006 seconds.)

CREATE TABLE IF NOT EXISTS student( number INT NOT NULL, NIM INT PRIMARY KEY AUTO_INCREMENT
NOT NULL, name VARCHAR(255) NOT NULL, cityAddress VARCHAR(100), age INT(25), IPK DECIMAL(2,1)
NOT NULL, department VARCHAR(100) NULL ) AUTO_INCREMENT = 12345, ENGINE=INNODB;

[ Edit inline ] [ Edit ] [ Create PHP code ]
```

3. Insert data into the table

```
1 USE university;
2
3 INSERT INTO student (number, name, cityAddress, age, IPK, department)
4 VALUES
5     (1, "Adi", "Jakarta", 17, 2.5, "Math"),
6     (2, "Ani", "Yogyakarta", 20, 2.1, "Math"),
7     (3, "Ari", "Surabaya", 18, 2.5, "Computer"),
8     (4, "Ali", "Banjarmasin", 20, 3.5, "Computer"),
9     (5, "Abi", "Medan", 17, 3.7, "Math"),
10    (6, "Budi", "Jakarta", 19, 3.8, "Computer"),
11    (7, "Boni", "Yogyakarta", 20, 3.2, "Computer"),
12    (8, "Bobi", "Surabaya", 17, 2.7, "Computer"),
13    (9, "Beni", "Banjarmasin", 18, 2.3, "Computer"),
14    (10, "Cepi", "Jakarta", 20, 2.2, NULL),
15    (11, "Coni", "Yogyakarta", 22, 2.6, NULL),
16    (12, "Ceki", "Surabaya", 21, 2.5, "Math"),
17    (13, "Dodi", "Jakarta", 20, 3.1, "Math"),
18    (14, "Didi", "Yogyakarta", 19, 3.2, "Physics"),
19    (15, "Deri", "Surabaya", 19, 3.3, "Physics"),
20    (16, "Eli", "Jakarta", 20, 2.9, "Physics"),
21    (17, "Endah", "Yogyakarta", 18, 2.8, "Physics"),
22    (18, "Feni", "Jakarta", 17, 2.7, NULL),
23    (19, "Farah", "Yogyakarta", 18, 3.5, NULL),
24    (20, "Fandi", "Surabaya", 19, 3.4, NULL);
```

✓ MySQL returned an empty result set (i.e. zero rows). (Query took 0.0002 seconds)

USE university;

[Edit inline] [Edit] [Create PHP code]

✓ 20 rows inserted.
Inserted row id: 12364 (Query took 0.0004 seconds)

```
INSERT INTO student (number, name, cityAddress, age, IPK, department) VALUES (1, "Adi", "Jakarta", 17, 2.5, "Math"), (2, "Ani", "Yogyakarta", 20, 2.1, "Math"), (3, "Ari", "Surabaya", 18, 2.5, "Computer"), (4, "Ali", "Banjarmasin", 20, 3.5, "Computer"), (5, "Abi", "Medan", 17, 3.7, "Math"), (6, "Budi", "Jakarta", 19, 3.8, "Computer"), (7, "Boni", "Yogyakarta", 20, 3.2, "Computer"), (8, "Bobi", "Surabaya", 17, 2.7, "Computer"), (9, "Beni", "Banjarmasin", 18, 2.3, "Computer"), (10, "Cepi", "Jakarta", 20, 2.2, NULL), (11, "Coni", "Yogyakarta", 22, 2.6, NULL), (12, "Ceki", "Surabaya", 21, 2.5, "Math"), (13, "Dodi", "Jakarta", 20, 3.1, "Math"), (14, "Didi", "Yogyakarta", 19, 3.2, "Physics"), (15, "Deri", "Surabaya", 19, 3.3, "Physics"), (16, "Eli", "Jakarta", 20, 2.9, "Physics"), (17, "Endah", "Yogyakarta", 18, 2.8, "Physics"), (18, "Feni", "Jakarta", 17, 2.7, NULL), (19, "Farah", "Yogyakarta", 18, 3[...])
```

[Edit]

Table Output:

✓ Showing rows 0 - 19 (20 total, Query took 0.0003 seconds.)								
SELECT * FROM `student`								
<input type="checkbox"/> Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]								
		number	NIM	name	cityAddress	age	IPK	department
<input type="checkbox"/>	Edit	Copy	Delete	1	12345	Adi	Jakarta	17 2.5 Math
<input type="checkbox"/>	Edit	Copy	Delete	2	12346	Ani	Yogyakarta	20 2.1 Math
<input type="checkbox"/>	Edit	Copy	Delete	3	12347	Ari	Surabaya	18 2.5 Computer
<input type="checkbox"/>	Edit	Copy	Delete	4	12348	Ali	Banjarmasin	20 3.5 Computer
<input type="checkbox"/>	Edit	Copy	Delete	5	12349	Abi	Medan	17 3.7 Math
<input type="checkbox"/>	Edit	Copy	Delete	6	12350	Budi	Jakarta	19 3.8 Computer
<input type="checkbox"/>	Edit	Copy	Delete	7	12351	Boni	Yogyakarta	20 3.2 Computer
<input type="checkbox"/>	Edit	Copy	Delete	8	12352	Bobi	Surabaya	17 2.7 Computer
<input type="checkbox"/>	Edit	Copy	Delete	9	12353	Beni	Banjarmasin	18 2.3 Computer
<input type="checkbox"/>	Edit	Copy	Delete	10	12354	Cepi	Jakarta	20 2.2 NULL
<input type="checkbox"/>	Edit	Copy	Delete	11	12355	Coni	Yogyakarta	22 2.6 NULL
<input type="checkbox"/>	Edit	Copy	Delete	12	12356	Ceki	Surabaya	21 2.5 Math
<input type="checkbox"/>	Edit	Copy	Delete	13	12357	Dodi	Jakarta	20 3.1 Math
<input type="checkbox"/>	Edit	Copy	Delete	14	12358	Didi	Yogyakarta	19 3.2 Physics
<input type="checkbox"/>	Edit	Copy	Delete	15	12359	Deri	Surabaya	19 3.3 Physics
<input type="checkbox"/>	Edit	Copy	Delete	16	12360	Eli	Jakarta	20 2.9 Physics
<input type="checkbox"/>	Edit	Copy	Delete	17	12361	Endah	Yogyakarta	18 2.8 Physics
<input type="checkbox"/>	Edit	Copy	Delete	18	12362	Feni	Jakarta	17 2.7 NULL
<input type="checkbox"/>	Edit	Copy	Delete	19	12363	Farah	Yogyakarta	18 3.5 NULL
<input type="checkbox"/>	Edit	Copy	Delete	20	12364	Fandi	Surabaya	19 3.4 NULL

1. Show city address column without any duplicate

✓ Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.)

```
SELECT DISTINCT cityAddress FROM student;
```

☐ Profiling [[Edit inline](#)] [[Edit](#)] [[Explain SQL](#)] [[Create PHP c](#)]

	cityAddress
<input type="checkbox"/> Edit Copy Delete	Jakarta
<input type="checkbox"/> Edit Copy Delete	Yogyakarta
<input type="checkbox"/> Edit Copy Delete	Surabaya
<input type="checkbox"/> Edit Copy Delete	Banjarmasin
<input type="checkbox"/> Edit Copy Delete	Medan

2. Show student name data from computer department

✓ Showing rows 0 - 5 (6 total, Query took 0.0003 seconds.)

```
SELECT name from student WHERE department = "computer";
```

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	name
<input type="checkbox"/> Edit Copy Delete	Ari
<input type="checkbox"/> Edit Copy Delete	Ali
<input type="checkbox"/> Edit Copy Delete	Budi
<input type="checkbox"/> Edit Copy Delete	Boni
<input type="checkbox"/> Edit Copy Delete	Bobi
<input type="checkbox"/> Edit Copy Delete	Beni

3. Show nim, name , age and address data sorted from the oldest student

✓ Showing rows 0 - 19 (20 total, Query took 0.0004 seconds.) [age: 22... - 17...]

```
SELECT NIM, name, age, cityAddress from student ORDER BY age DESC;
```

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				NIM	name	age	cityAddress
<input type="checkbox"/>				12355	Coni	22	Yogyakarta
<input type="checkbox"/>				12356	Ceki	21	Surabaya
<input type="checkbox"/>				12346	Ani	20	Yogyakarta
<input type="checkbox"/>				12348	Ali	20	Banjarmasin
<input type="checkbox"/>				12351	Boni	20	Yogyakarta
<input type="checkbox"/>				12354	Cepi	20	Jakarta
<input type="checkbox"/>				12357	Dodi	20	Jakarta
<input type="checkbox"/>				12360	Eli	20	Jakarta
<input type="checkbox"/>				12350	Budi	19	Jakarta
<input type="checkbox"/>				12358	Didi	19	Yogyakarta
<input type="checkbox"/>				12359	Deri	19	Surabaya
<input type="checkbox"/>				12364	Fandi	19	Surabaya
<input type="checkbox"/>				12347	Ari	18	Surabaya
<input type="checkbox"/>				12353	Beni	18	Banjarmasin
<input type="checkbox"/>				12361	Endah	18	Yogyakarta
<input type="checkbox"/>				12363	Farah	18	Yogyakarta
<input type="checkbox"/>				12345	Adi	17	Jakarta
<input type="checkbox"/>				12349	Abi	17	Medan
<input type="checkbox"/>				12352	Bobo	17	Surabaya
<input type="checkbox"/>				12362	Feni	17	Jakarta

4. Show name and age of 3 youngest student from Jakarta

Showing rows 0 - 2 (3 total, Query took 0.0004 seconds.) [age: 17... - 19...]							
SELECT name, age FROM student WHERE cityAddress = "Jakarta" ORDER BY age LIMIT 3;							
<input type="checkbox"/> Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]							
					name	age	
<input type="checkbox"/>					Adi	17	
<input type="checkbox"/>					Feni	17	
<input type="checkbox"/>					Budi	19	

5. Show name and ipk student form Jakarta with ipk under 2.5

Showing rows 0 - 0 (1 total, Query took 0.0005 seconds.)							
SELECT name, IPK from student WHERE cityAddress = "Jakarta" AND IPK < 2.5;							
<input type="checkbox"/> Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]							
					name	IPK	
<input type="checkbox"/>					Cepi	2.2	

6. Show any student name from Yogyakarta or have age older than 20

Showing rows 0 - 6 (7 total, Query took 0.0003 seconds.)

```
SELECT name from student WHERE age > 20 OR cityAddress = "Yogyakarta";
```

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	name
<input type="checkbox"/> Edit Copy Delete	Ani
<input type="checkbox"/> Edit Copy Delete	Boni
<input type="checkbox"/> Edit Copy Delete	Coni
<input type="checkbox"/> Edit Copy Delete	Ceki
<input type="checkbox"/> Edit Copy Delete	Didi
<input type="checkbox"/> Edit Copy Delete	Endah
<input type="checkbox"/> Edit Copy Delete	Farah

7. Show any student name and address not from Jakarta and Surabaya

Showing rows 0 - 8 (9 total, Query took 0.0006 seconds.)

```
SELECT name, cityAddress FROM student WHERE cityAddress NOT IN("Jakarta", "Surabaya");
```

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	name	cityAddress
<input type="checkbox"/> Edit Copy Delete	Ani	Yogyakarta
<input type="checkbox"/> Edit Copy Delete	Ali	Banjarmasin
<input type="checkbox"/> Edit Copy Delete	Abi	Medan
<input type="checkbox"/> Edit Copy Delete	Boni	Yogyakarta
<input type="checkbox"/> Edit Copy Delete	Beni	Banjarmasin
<input type="checkbox"/> Edit Copy Delete	Coni	Yogyakarta
<input type="checkbox"/> Edit Copy Delete	Didi	Yogyakarta
<input type="checkbox"/> Edit Copy Delete	Endah	Yogyakarta
<input type="checkbox"/> Edit Copy Delete	Farah	Yogyakarta

8. Show name, age and ipk student with ipk from 2.5 to 3.5

Showing rows 0 - 14 (15 total, Query took 0.0007 seconds.)

```
SELECT name, age, IPK from student WHERE IPK BETWEEN 2.5 AND 3.5;
```

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				name	age	IPK
<input type="checkbox"/>				Adi	17	2.5
<input type="checkbox"/>				Ari	18	2.5
<input type="checkbox"/>				Ali	20	3.5
<input type="checkbox"/>				Boni	20	3.2
<input type="checkbox"/>				Bobi	17	2.7
<input type="checkbox"/>				Coni	22	2.6
<input type="checkbox"/>				Ceki	21	2.5
<input type="checkbox"/>				Dodi	20	3.1
<input type="checkbox"/>				Didi	19	3.2
<input type="checkbox"/>				Deri	19	3.3
<input type="checkbox"/>				Eli	20	2.9
<input type="checkbox"/>				Endah	18	2.8
<input type="checkbox"/>				Feni	17	2.7
<input type="checkbox"/>				Farah	18	3.5
<input type="checkbox"/>				Fandi	19	3.4

9. Show student name that have letter a in the name

✓ Showing rows 0 - 7 (8 total, Query took 0.0003 seconds.)

```
SELECT name FROM student WHERE name LIKE '%a%';
```

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				name
<input type="checkbox"/>				Adi
<input type="checkbox"/>				Ani
<input type="checkbox"/>				Ari
<input type="checkbox"/>				Ali
<input type="checkbox"/>				Abi
<input type="checkbox"/>				Endah
<input type="checkbox"/>				Farah
<input type="checkbox"/>				Fandi

10. Show student NIM with null data

✓ Showing rows 0 - 4 (5 total, Query took 0.0003 seconds.)

```
SELECT NIM from student WHERE department IS NULL;
```

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				NIM
<input type="checkbox"/>	 Edit	 Copy	 Delete	12354
<input type="checkbox"/>	 Edit	 Copy	 Delete	12355
<input type="checkbox"/>	 Edit	 Copy	 Delete	12362
<input type="checkbox"/>	 Edit	 Copy	 Delete	12363
<input type="checkbox"/>	 Edit	 Copy	 Delete	12364