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Class : IUP CS B

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,
     name VARCHAR(255) NOT NULL,
6
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;
```

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

USE university;

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

WySQL 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=INNOOB;

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

3. Insert data into the table

```
1 USE university;
3 INSERT INTO student (number, name, cityAddress, age, IPK, department)
4 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"),
10
       (7, "Boni", "Yogyakarta", 20, 3.2, "Computer"),
       (8, "Bobi", "Surabaya", 17, 2.7, "Computer"),
       (9, "Beni", "Banjarmasin", 18, 2.3, "Computer"),
13
       (10, "Cepi", "Jakarta", 20, 2.2, NULL),
       (11, "Coni", "Yogyakarta", 22, 2.6, NULL),
15
       (12, "Ceki", "Surabaya", 21, 2.5, "Math"),
       (13, "Dodi", "Jakarta", 20, 3.1, "Math"),
       (14, "Didi", "Yogyakarta", 19, 3.2, "Physics"),
18
       (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, 3.5, NULL),
       (20, "Fandi", "Surabaya", 19, 3.4, NULL);
```

```
W/SSQL returned an empty result set (i.e. zero rows). (Query took 0 0002 seconds.)

USE university;

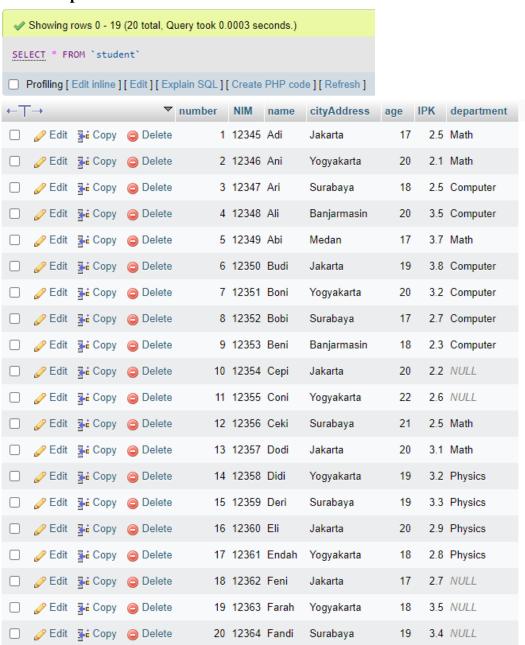
[Edit inline] [Edit] [Create PHP code]

✓ 20 rows inserted.
Inserted row id: 12364 (Query took 0 0004 seconds.)

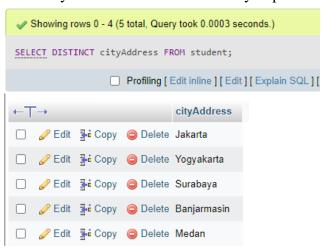
INSERT INTO student (number, name, cityAddress, age, IPK, department) VALUES (1, "Adi", "Jakarta", 17, 2.5, "Nath"), (2, "Ani", "Vogyakarta", 20, 2.1, "Nath"), (3, "Ari", "Surabaya", 18, 2.5, "Computer"), (4, "Ali", "Surabaya", 17, 2.7, "Computer"), (5, "Abi", "Nedam", 17, 3.7, "Nath"), (6, "Budi", "Jakarta",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

[Edit]
```

Table Output:



1. Show city address column without any duplicate



2. Show student name data from computer department



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

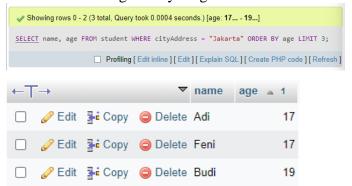
```
Showing rows 0 - 19 (20 total, Query took 0.0004 seconds.) [age: 22... - 17...]

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

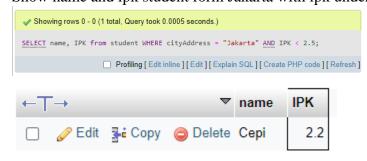
□ Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP of the content of
```



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



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



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



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



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;

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]
```



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



10. Show student NIM with null data

