

LAPORAN ASSIGMENT 2 PRAKTIKUM BASIS DATA

“Data Manipulation Language 2”



Nama : Faris Qanit

NIM : 20/462180/PA/20152

Dosen : Dzikri Rahadian Fudholi, S.Kom., M.Comp.

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LAB. ELEKTRONIKA DASAR DAN LAB. INSTRUMENTASI DASAR

DEPARTEMEN ILMU KOMPUTER DAN ELEKTRONIKA

FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

UNIVERSITAS GADJAH MADA

2021

ASSIGNMENT 4
Data Manipulation Language 2

Soal :

Buat database dengan data tabel *student* berikut:

| No | NIM | Name | City Address | Age | IPK | Departement |
|----|-------|-------|--------------|-----|-----|-------------|
| 1 | 12345 | Adi | Jakarta | 17 | 2,5 | Math |
| 2 | 12346 | Ani | Yogyakarta | 20 | 2,1 | Math |
| 3 | 12347 | Ari | Surabaya | 18 | 2,5 | Computer |
| 4 | 12348 | Ali | Banjarmasin | 20 | 3,5 | Computer |
| 5 | 12349 | Abi | Medan | 17 | 3,7 | Computer |
| 6 | 12350 | Budi | Jakarta | 19 | 3,8 | Computer |
| 7 | 12351 | Boni | Yogyakarta | 20 | 3,2 | Computer |
| 8 | 12352 | Bobo | Surabaya | 17 | 2,7 | Computer |
| 9 | 12353 | Beni | Banjarmasin | 18 | 2,3 | Computer |
| 10 | 12354 | Cepi | Jakarta | 20 | 2,2 | Null |
| 11 | 12355 | Coni | Yogyakarta | 22 | 2,6 | Null |
| 12 | 12356 | Ceki | Surabaya | 21 | 2,5 | Math |
| 13 | 12357 | Dodi | Jakarta | 20 | 3,1 | Math |
| 14 | 12358 | Didi | Yogyakarta | 19 | 3,2 | Physics |
| 15 | 12359 | Deri | Surabaya | 19 | 3,3 | Physics |
| 16 | 12360 | Eli | Jakarta | 20 | 2,9 | Physics |
| 17 | 12361 | Endah | Yogyakarta | 18 | 2,8 | Physics |
| 18 | 12362 | Feni | Jakarta | 17 | 2,7 | Null |
| 19 | 12363 | Farah | Yogyakarta | 18 | 3,5 | Null |
| 20 | 12364 | Fandi | Surabaya | 19 | 3,4 | Null |

1. Tampilkan kolom *city address* tanpa ada nilai duplikat
2. Tampilkan data *name* dari mahasiswa yang memiliki departemen 'Computer'
3. Tampilkan data *nim*, *name*, *age* dan *address* yang diurutkan dari mahasiswa yang tertua
4. Tampilkan *name* dan *age* dari 3 mahasiswa termuda dari 'Jakarta'
5. Tampilkan *name* dan *ipk* mahasiswa dari 'Jakarta' dengan *ipk* dibawah 2,5
6. Tampilkan *name* mahasiswa mana saja yang dari 'Yogyakarta' atau berusia lebih dari 20 tahun
7. Tampilkan *name* dan *address* mahasiswa yang bukan dari 'Jakarta' dan 'Surabaya'
8. Tampilkan *name*, *age* dan *ipk* mahasiswa dengan *ipk* dari 2,5 hingga 3,5
9. Tunjukkan *name* mahasiswa yang memiliki huruf a pada namanya
10. Tampilkan NIM mahasiswa dengan data NULL

Jawab :

1. SELECT DISTINCT City_Address FROM student

| City_Address |
|--------------|
| Jakarta |
| Yogyakarta |
| Surabaya |
| Banjarmasin |
| Medan |

2. SELECT Name FROM student
WHERE Departement = 'Computer'

| Name |
|------|
| Ari |
| Ali |
| Abi |
| Budi |
| Boni |
| Bobi |
| Beni |

3. SELECT NIM,Name,Age, City_Address FROM student
ORDER BY Age DESC

| NIM | Name | Age | City_Address |
|-------|-------|-----|--------------|
| 12355 | Coni | 22 | Yogyakarta |
| 12356 | Ceki | 21 | Surabaya |
| 12346 | Ani | 20 | Yogyakarta |
| 12348 | Ali | 20 | Banjarmasin |
| 12351 | Boni | 20 | Yogyakarta |
| 12354 | Cepi | 20 | Jakarta |
| 12357 | Dodi | 20 | Jakarta |
| 12360 | Eli | 20 | Jakarta |
| 12350 | Budi | 19 | Jakarta |
| 12358 | Didi | 19 | Yogyakarta |
| 12359 | Deri | 19 | Surabaya |
| 12364 | Fandi | 19 | Surabaya |
| 12347 | Ari | 18 | Surabaya |
| 12353 | Beni | 18 | Banjarmasin |
| 12361 | Endah | 18 | Yogyakarta |
| 12363 | Farah | 18 | Yogyakarta |
| 12345 | Adi | 17 | Jakarta |
| 12349 | Abi | 17 | Medan |
| 12352 | Bobi | 17 | Surabaya |
| 12362 | Feni | 17 | Jakarta |

4. SELECT Name, Age From student
WHERE City_Address = 'Jakarta'
ORDER BY Age

LIMIT 3

| Name | Age |
|------|-----|
| Adi | 17 |
| Feni | 17 |
| Budi | 19 |

5. SELECT Name, Age FROM student
WHERE City_Address = 'Jakarta' AND IPK < 2.5

| Name | Age |
|------|-----|
| Cepi | 20 |

6. SELECT Name FROM student
WHERE City_Address = 'Yogyakarta' OR Age > 20

| Name |
|-------|
| Ani |
| Boni |
| Coni |
| Ceki |
| Didi |
| Endah |
| Farah |

7. SELECT Name, City_Address FROM student
WHERE City_Address NOT IN ('Jakarta','Surabaya')

| Name | City_Address |
|-------|--------------|
| Ani | Yogyakarta |
| Ali | Banjarmasin |
| Abi | Medan |
| Boni | Yogyakarta |
| Beni | Banjarmasin |
| Coni | Yogyakarta |
| Didi | Yogyakarta |
| Endah | Yogyakarta |
| Farah | Yogyakarta |

8. SELECT Name, Age, IPK FROM student
WHERE IPK BETWEEN 2.5 AND 3.5

| Name | Age | IPK |
|-------|-----|-----|
| Adi | 17 | 2.5 |
| Ari | 18 | 2.5 |
| Ali | 20 | 3.5 |
| Boni | 20 | 3.2 |
| Bobo | 17 | 2.7 |
| Coni | 22 | 2.6 |
| Ceki | 21 | 2.5 |
| Dodi | 20 | 3.1 |
| Didi | 19 | 3.2 |
| Deri | 19 | 3.3 |
| Eli | 20 | 2.9 |
| Endah | 18 | 2.8 |
| Feni | 17 | 2.7 |
| Farah | 18 | 3.5 |
| Fandi | 19 | 3.4 |

9. SELECT Name FROM student
WHERE Name LIKE '%a%'

| Name |
|-------|
| Adi |
| Ani |
| Ari |
| Ali |
| Abi |
| Endah |
| Farah |
| Fandi |

10. SELECT NIM FROM student
WHERE Departement IS NULL

| NIM |
|-------|
| 12354 |
| 12355 |
| 12362 |
| 12363 |
| 12364 |