

TUGAS Basis Data 5.1



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A. Latihan
Employees

fname	minit	lname	ssn	bdate	address	sex	salary	superssn	dno
Ahmad	V	Jabbar	987987987	29-Mar-59	980 Dallas, Houston, TX	M	25000	987654321	4
Alicia	J	Zelaya	999887777	19-Jul-58	3321 Castle, Spring, TX	F	25000	987654321	4
Franklin	T	Wong	333445555	08-Dec-45	638 Voss, Houston, TX	M	40000	888665555	5
James	E	Borg	888665555	10-Nov-27	450 Stone, Houston, TX	M	55000		1
Jennifer	S	Wallace	987654321	20-Jun-31	291 Berry, Bellaire, TX	F	43000	888665555	4
John	B	Smith	123456789	01-Sep-55	731 Fondren, Houston, TX	M	30000	333445555	5
Joyce	A	English	453453453	31-Jul-62	5631 Rice, Houston, TX	F	25000	333445555	5
Ramesh	K	Narayan	666884444	15-Sep-52	975 Fire Oak, Humble, TX	F	25000	333445555	5

1. Cara 1 :

$\sigma(\text{fname}='Alicia' \text{ AND } \text{dno}=4) \text{ OR } (\text{fname}='Ramesh' \text{ AND } \text{dno}=4) \text{ (EMPLOYEES)}$

Cara 2 :

$\sigma(\text{fname}='Alicia' \text{ OR } \text{fname}='Ramesh') \text{ AND } (\text{dno}=4) \text{ (EMPLOYEES)}$

2. $\sigma \text{dno}=4 \text{ AND } \text{salary} > 25000 \text{ (EMPLOYEES)}$

3. Cara 1 : Asumsi bahwa antara adalah nilai awal dan akhir ikut ke dalamnya

$\sigma(\text{minit}='A' \text{ OR } \text{minit}='B' \text{ OR } \text{minit}='S') \text{ AND } (\text{salary} \geq 30000) \text{ AND } (\text{salary} \leq 50000) \text{ (EMPLOYEES)}$

Cara 2 : Asumsi bahwa antara adalah nilai awal dan akhir tidak ikut ke dalamnya

$\sigma(\text{minit}='A' \text{ OR } \text{minit}='B' \text{ OR } \text{minit}='S') \text{ AND } (\text{salary} > 30000) \text{ AND } (\text{salary} < 50000) \text{ (EMPLOYEES)}$

4. Menampilkan data employees dengan nama depan "James" atau employee yang bekerja di departemen 4 dan gaji nya lebih dari 40000

5. Menampilkan data dengan atribut "LNAME", "FNAME" dan "SALARY" pada table "Employees"

6. $\pi \text{ LNAME, FNAME, SALARY } (\sigma \text{ DNO}=5 \text{ (EMPLOYEES)})$

Jawab :

Menampilkan data dengan atribut "LNAME", "FNAME" dan "SALARY" pada table "Employees" dengan hanya menampilkan data karyawan yang bekerja pada departement 5

STUDENT	
FN	LN
Susan	Yao
Sharukh	Khan
Johny	Indo
Barbara	Jones
Amy	Ford
Jimmy	Hendrix
Bon	Jovi

Instruktur	
FN	LN
John	Smith
Richard	Mark
Susan	Yao
Francis	Johnson
Sharukh	Khan

7. STUDENT \cup INSTRUKTUR

Jawab :

FN	LN
Susan	Yao
Sharukh	Khan
Johny	Indo
Barbara	Jones
Amy	Ford
Jimmy	Hendrix
Bon	Jovi
John	Smith
Richard	Mark
Francis	Johnson

8. STUDENT – INSTRUKTUR

Jawab :

FN	LN
Johny	Indo
Barbara	Jones
Amy	Ford
Jimmy	Hendrix
Bon	Jovi

9. STUDENT \times INSTRUKTUR

Jawab :

STUDENT		INSTRUKTUR	
FN1	LN1	FN2	LN2
Susan	Yao	John	Smith
Susan	Yao	Richard	Mark
Susan	Yao	Susan	Yao
Susan	Yao	Francis	Johnson
Susan	Yao	Sharukh	Khan
Sharukh	Khan	John	Smith
Sharukh	Khan	Richard	Mark
Sharukh	Khan	Susan	Yao
Sharukh	Khan	Francis	Johnson
Sharukh	Khan	Sharukh	Khan
Johny	Indo	John	Smith
Johny	Indo	Richard	Mark
Johny	Indo	Susan	Yao
Johny	Indo	Francis	Johnson
Johny	Indo	Sharukh	Khan
Barbara	Jones	John	Smith
Barbara	Jones	Richard	Mark
Barbara	Jones	Susan	Yao
Barbara	Jones	Francis	Johnson
Barbara	Jones	Sharukh	Khan
Amy	Ford	John	Smith
Amy	Ford	Richard	Mark
Amy	Ford	Susan	Yao
Amy	Ford	Francis	Johnson
Amy	Ford	Sharukh	Khan
Jimmy	Hendrix	John	Smith
Jimmy	Hendrix	Richard	Mark
Jimmy	Hendrix	Susan	Yao
Jimmy	Hendrix	Francis	Johnson

Jimmy	Hendrix	Sharukh	Khan
Bon	Jovi	John	Smith
Bon	Jovi	Richard	Mark
Bon	Jovi	Susan	Yao
Bon	Jovi	Francis	Johnson
Bon	Jovi	Sharukh	Khan

10. $\pi_{LN}(\sigma(FNAME = 'Richard' \text{ OR } FNAME = 'Johny')(STUDENT \cup INSTRUKTUR))$

Jawab :

Menampilkan atribut "LN" dengan "FN" adalah "Richard" dan "FN" adalah "Johny" dari penggabungan 2 table "STUDENT" & "INSTRUKTUR"

STUDENT	INSTRUKTUR
LN1	LN2
Indo	Mark