

LAPORAN ASSIGMENT PRAKTIKUM BASIS DATA

“Normalization”



Nama : Faris Qanit

NIM : 20/462180/PA/20152

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

Tanggal : 13 November 2021

Kelas : KOMB

LAB. ELEKTRONIKA DASAR DAN LAB. INSTRUMENTASI DASAR

DEPARTEMEN ILMU KOMPUTER DAN ELEKTRONIKA

FAKULTAS MATEMATIKA DAN ILMU PENGETAHUAN ALAM

UNIVERSITAS GADJAH MADA

2021

ACTIVITY 10

NORMALISATION

Normalization Exercise 1

<u>PET ID</u>	<u>PET NAME</u>	<u>PET TYPE</u>	<u>PET AGE</u>	<u>OWNER</u>	<u>VISIT DATE</u>	<u>PROCEDURE</u>
246	ROVER	DOG	12	SAM COOK	JAN 13/2002	01 - RABIES VACCINATION
					MAR 27/2002	10 - EXAMINE and TREAT WOUND
					APR 02/2002	05 - HEART WORM TEST
298	SPOT	DOG	2	TERRY KIM	JAN 21/2002	08 - TETANUS VACCINATION
					MAR 10/2002	05 - HEART WORM TEST
341	MORRIS	CAT	4	SAM COOK	JAN 23/2001	01 - RABIES VACCINATION
					JAN 13/2002	01 - RABIES VACCINATION
519	TWEEDY	BIRD	2	TERRY KIM	APR 30/2002	20 - ANNUAL CHECK UP
					APR 30/2002	12 - EYE WASH

UNF:

Pet ID	Pet Name	Pet Type	Pet Age	Owner	Visit Date	Procedure
246	Rover	Dog	12	Sam Cook	2002-01-13	01 – RABIES VACCINATION
					2002-03-27	10 – EXAMINE AND TREAT WOUND
					2002-04-02	05 – HEART WORM TEST

298	Spot	Dog	2	Terry Kim	2002-01-21 2002-10-03	08 – TETANUS VACCINATION 05 – HEART WORM TEST
341	Morris	Cat	4	Sam Cook	2001-01-23 2002-01-13	01 – RABIES VACCINATION 01 – RABIES VACCINATION
519	Tweedy	Bird	2	Terry Kim	2002-04-30 2002-04-30	20 – ANNUAL CHECK UP 12 – EYE WASH

INF:

Pet ID	Pet Name	Pet Type	Pet Age	Owner
246	Rover	Dog	12	Sam Cook
298	Spot	Dog	2	Terry Kim
341	Morris	Cat	4	Sam Cook
519	Tweedy	Bird	2	Terry Kim

Pet ID	Visit Date	Procedure
246	2002-01-13	01 – RABIES VACCINATION

246	2002-03-27	10 – EXAMINE AND TREAT WOUND
246	2002-04-02	05 – HEART WORM TEST
298	2002-01-21	08 – TETANUS VACCINATION
298	2002-10-03	05 – HEART WORM TEST
341	2001-01-23	01 – RABIES VACCINATION
341	2002-01-13	01 – RABIES VACCINATION
519	2002-04-30	20 – ANNUAL CHECK UP
519	2002-04-30	12 – EYE WASH

2NF:

Pet ID	Pet Name	Pet Type	Age	Owner
246	Rover	Dog	12	Sam Cook
298	Spot	Dog	2	Terry Kim
341	Morris	Cat	4	Sam Cook
519	Tweedy	Bird	2	Terry Kim

Pet ID	Visit Date	ProcedureNo.	ProcedureName
246	2002-01-13	01	RABIES VACCINATION
246	2002-03-27	10	EXAMINE AND TREAT WOUND
246	2002-04-02	05	HEART WORM TEST
298	2002-01-21	08	TETANUS VACCINATION
298	2002-10-03	05	HEART WORM TEST
341	2001-01-23	01	RABIES VACCINATION
341	2002-01-13	01	RABIES VACCINATION
519	2002-04-30	20	ANNUAL CHECK UP
519	2002-04-30	12	EYE WASH

3NF:

Pet ID	Pet Name	Pet Type	Age	Owner
246	Rover	Dog	12	Sam Cook
298	Spot	Dog	2	Terry Kim
341	Morris	Cat	4	Sam Cook

519	Tweedy	Bird	2	Terry Kim
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Pet ID	Visit Date	<u>ProcedureNo.</u>
246	2002-01-13	01
246	2002-03-27	10
246	2002-04-02	05
298	2002-01-21	08
298	2002-10-03	05
341	2001-01-23	01
341	2002-01-13	01
519	2002-04-30	20
519	2002-04-30	12

ProcedureNo.	ProcedureName
01	RABIES VACCINATION
05	HEART WORM TEST
08	TETANUS VACCINATION
10	EXAMINE AND TREAT WOUND
12	EYE WASH
20	ANNUAL CHECK UP

INVOICE

HILLTOP ANIMAL HOSPITAL

DATE: JAN 13/2002

INVOICE # 987

MR. RICHARD COOK

123 THIS STREET

MY CITY, ONTARIO

Z5Z 6G6

<u>PET</u>	<u>PROCEDURE</u>	<u>AMOUNT</u>
ROVER	RABIES VACCINATION	30.00
MORRIS	RABIES VACCINATION	24.00
	TOTAL	54.00
	TAX (8%)	<u>4.32</u>
	AMOUNT OWING	<u>58.32</u>

Normalization Exercise 2

UNF:

INVOICE ID	OWNER	DATE	ADDRESS	PET NAME	PROCEDURE	AMOUNT
987	RICHARD COOK	JAN 13/2002	123 THIS STREET, MY CITY, ONTARIO, Z5Z 6G6	ROVER	RABIES VACCINATION	30.00
987	RICHARD COOK	JAN 13/2002	123 THIS STREET, MY CITY, ONTARIO, Z5Z 6G6	MORRIS	RABIES VACCINATION	24.00

1NF:

Tabel Invoice

INVOICE ID	OWNER	DATE	STREET	CITY	POST CODE
987	RICHARD COOK	JAN 13/2002	123 THIS STREET	MY CITY, ONTARIO	Z5Z 6G6

987	RICHARD COOK	JAN 13/2002	123 THIS STREET	MY CITY, ONTARIO	Z5Z 6G6
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Tabel Purchase

INVOICE ID	PET ID	PET NAME	PROCEDURE NAME	AMOUNT
987	246	ROVER	RABIES VACCINATION	30.00
987	341	MORRIS	RABIES VACCINATION	24.00

2NF:

Tabel Invoice

INVOICE ID	OWNER	DATE	STREET	CITY	POST CODE
987	RICHARD COOK	JAN 13/2002	123 THIS STREET	MY CITY, ONTARIO	Z5Z 6G6
987	RICHARD COOK	JAN 13/2002	123 THIS STREET	MY CITY, ONTARIO	Z5Z 6G6

Tabel Purchase

INVOICE ID	PET ID	PROCEDURE NAME	AMOUNT
987	246	RABIES VACCINATION	30.00
987	341	RABIES VACCINATION	24.00

Tabel Pet

PET ID	PET NAME
246	ROVER
341	MORRIS

3NF:

Tabel Invoice

INVOICE ID	DATE	OWNER ID
987	JAN 13/2002	227

987	JAN 13/2002	227
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Tabel Purchase

INVOICE ID	PET ID	PROCEDURE NAME	AMOUNT
987	246	RABIES VACCINATION	30.00
987	341	RABIES VACCINATION	24.00

Tabel Pet

PET ID	PET NAME
246	ROVER
341	MORRIS

Tabel Owner

OWNER ID	OWNER	STREET	CITY	POST CODE
227	RICHARD COOK	123 THIS STREET	MY CITY, ONTARIO	Z5Z 6G6

Gallery Customer History Form

Customer Name

Jackson, Elizabeth

Phone (206) 284-6783

123 – 4th Avenue

Fonthill, ON

L3J 4S4

Purchases Made

Artist	Title	Purchase Date	Sales Price
03 - Carol Channing	Laugh with Teeth	09/17/2000	7000.00
15 - Dennis Frings	South toward Emerald Sea	05/11/2000	1800.00
03 - Carol Channing	<u>At</u> the Movies	02/14/2002	5550.00
15 - Dennis Frings	South toward Emerald Sea	07/15/2003	2200.00

Normalization Exercise 3

The Gill Art Gallery wishes to maintain data on their customers, artists and paintings. They may have several paintings by each artist in the gallery at one time. Paintings may be bought and sold several times. In other words, the gallery may sell a painting, then buy it back at a later date and sell it to another customer.

UNF:

CUSTOMER NAME	ADDRES S	PHONE NUMB ER	ARTIST	TITTLE	PURCHASE DATE	SALES PRICE
JACKSON, ELIZABETH	123-4 th AVENUE FONTHI LL, ON,	(206) 28 4-6783	03-CAROL CHANNING	LAUGH WITH TEETH	09/17/2000	7000.00

	L3J 4S4					
JACKSON, ELIZABETH	123-4 th AVENUE FONTHI LL, ON, L3J 4S4	(206)28 4-6783	15- DENNIS FRINGS	SOUTH TOWARD EMERALD SEA	05/11/2000	1800.00
JACKSON, ELIZABETH	123-4 th AVENUE FONTHI LL, ON, L3J 4S4	(206)28 4-6783	03-CAROL CHANNING	AT THE MOVIE	02/14/2002	5550.00
JACKSON, ELIZABETH	123-4 th AVENUE FONTHI LL, ON, L3J 4S4	(206)28 4-6783	15-DENNIS FRINGS	SOUTH TOWARD EMERALD SEA	07/15/2003	2200.00

INF:

Tabel Customer

CUSTOMER ID	CUSTOMER NAME	STREET	CITY	POST CODE	PHONE NUMBER
C01	JACKSON, ELIZABETH	123-4 th AVENUE	FONT HILL, ON	L3J 4S4	(206)284-6783

Tabel Art

CUSTOMER ID	ARTIST ID	ARTIST	PAINTING ID	TITLE	PURCHASE DATE	SALES PRICE
C01	03	CAROL CHANNING	P03	LAUGH WITH TEETH	09/17/2000	7000.00
C01	15	DENNIS FRINGS	P02	SOUTH TOWARD EMERALD SEA	05/11/2000	1800.00
C01	03	CAROL CHANNING	P05	AT THE MOVIE	02/14/2002	5550.00

	15	DENNIS FRINGS	P02	SOUTH TOWARD EMERALD SEA	07/15/2003	2200.00
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2NF:

Tabel Customer

CUSTOMER ID	CUSTOMER NAME	STREET	CITY	POST CODE	PHONE NUMBER
C01	JACKSON, ELIZABETH	123-4 th AVENUE	FONT HILL, ON	L3J 4S4	(206)284-6783

Tabel Purchase

CUSTOMER ID	PAINTING ID	PURCHASE DATE	SALES PRICE
C01	P03	09/17/2000	7000.00
C01	P02	05/11/2000	1800.00
C01	P05	02/14/2002	5550.00
C01	P02	07/15/2003	2200.00

Tabel Painting

PAINTING ID	TITLE	ARTIST ID	ARTIST NAME
P03	LAUGH WITH TEETH	03	CAROL CHANNING
P02	SOUTH TOWARD EMERALD SEA	15	DENNIS FRINGS
P05	AT THE MOVIE	03	CAROL CHANNING

3NF:

Tabel Customer

CUSTOMER ID	CUSTOMER NAME	STREET	CITY	POST CODE	PHONE NUMBER

C01	JACKSON, ELIZABET H	123-4 th AVENU E	FONT HILL, ON	L3J 4S4	(206)284-6783
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Tabel Purchase

CUSTOMER ID	PAINTING ID	PURCHASE DATE	SALES PRICE
C01	P03	09/17/2000	7000.00
C01	P02	05/11/2000	1800.00
C01	P05	02/14/2002	5550.00
C01	P02	07/15/2003	2200.00

Tabel Painting

PAINTING ID	TITTLE	ARTIST ID
P03	LAUGH WITH TEETH	03
P02	SOUTH TOWARD EMERALD SEA	15
P05	AT THE MOVIE	03

Tabel ARTIST

ARTIST ID	ARTIST NAME
03	CAROL CHANNING
15	DENNIS FRINGS