# LAPORAN PRAKTIKUM PENGENALAN BASIS DATA

#### **Normalization**



# Franklyn Aldo Ignatia Lumbantoruan 11323010

DIII Teknologi Informasi

# INSTITUT TEKNOLOGI DEL FAKULTAS VOKASI

Task 1

Student	Advisor	Adv-	Class1	Class2	Class3	Dept
		Room				
1022	Jones	412	101-07	143-01	159-02	42
4123	Smith	216	201-01	211-02	214-01	43

#### 1NF:

#### **Tabel Adv-Room**

Class	Student	Advisor	Adv-Room	Dept
101-07	1022	Jones	412	42
201-01	4123	Smith	216	43
143-01	1022	Jones	412	42
211-02	4123	Smith	216	43
159-02	1022	Jones	412	42
214-01	4123	Smith	216	43

#### **2NF**:

#### **Tabel Class**

Class	Student
101-07	1022
201-01	4123
143-01	1022
211-02	4123
159-02	1022
214-01	4123

#### **Tabel Student**

Advisor	Adv-Room	Dept
Jones	412	42
Smith	216	43

#### **3NF**:

Advisor	Adv-Room	Dept	Student
Jones	412	42	1022
Smith	216	43	4123

Student	Advisor
1022	Jones
4123	Smith

Student	Advisor	Class
1022	Jones	101-07
1022	Jones	143-01
1022	Jones	159-02
4123	Smith	201-01
4123	Smith	211-02
4123	Smith	214-01

### Task 2 Unnormalized table

Full Names	Physical Addres	Movies Rented	Salutation	Category
Janes Jones	First street Plot	Pirates of the	Ms.	Action, Action
	No 4	Caribbean,		
		Clash of the		
		Titans		

Robert Phil	3 <sup>rd</sup> Street 34	Forgetting Sarah	Mr.	Romance,
		Marshal,		Romance
		Daddy's Little		
		Girls		
Vanessa Don	5 <sup>th</sup> Avenue	Clash of the	Ms.	Action
		Titans		

## 1NF:

#### **Tabel Movies**

Full Names	<b>Physical Addres</b>	<b>Movies Rented</b>	Salutation	Category
Janes Jones	First street Plot	Pirates of the	Ms.	Action
	No 4	Caribbean		
Janes Jones	First street Plot	Clash of the	Ms.	Action
	No 4	Titans		
Robert Phil	3 <sup>rd</sup> Street 34	Forgetting Sarah	Mr.	Romance
		Marshal		
Robert Phil	3 <sup>rd</sup> Street 34	Daddy's Little	Mr.	Romance
		Girls		
Vanessa Don	5 <sup>th</sup> Avenue	Clash of the	Ms.	Action
		Titans		

#### **2NF**:

#### **Tabel Customers**

Full Names	Physical Address	Salutation
Janes Jones	First street Plot No 4	Ms.
Robert Phil	3 <sup>rd</sup> Street 34	Mr.
Vanessa Don	5 <sup>th</sup> Avenue	Ms.

#### **Tabel Rented**

Movie Rented	Category

Pirates of the Caribbean	Action
Clash of the Titans	Action
Forgetting Sarah Marshal	Romance
Daddy's Little Girls	Romance

#### **3NF:**

Full Names	Physical Addres	Salutation
Janes Jones	First street Plot No 4	Ms.
Robert Phil	3 <sup>rd</sup> Street 34	Mr.
Vanessa Don	5 <sup>th</sup> Avenue	Ms.

Movies Rented	Category
Pirates of the Caribbean	Action
Clash of the Titans	Action
Forgetting Sarah Marshal	Romance
Daddy's Little Girls	Romance

Full Names	Movies Rented
Janes Jones	Pirates of the Caribbean
Janes Jones	Clash of the Titans
Robert Phil	Forgetting Sarah Marshal
Robert Phil	Daddy's Little Girls
Vanessa Don	Clash of the Titans