# TUGAS BASIS DATA FUNCTIONAL DEPENDENCY



Nama : MUKHAMAD IKHSANUDIN

NIM : 082011633086

PROGRAM STUDI S1 SISTEM INFORMASI FAKULTAS SAINS DAN TEKNOLOGI UNIVERSITAS AIRLANGGA 2021

# Tugas Teori : Fungsional Dependensi

- 1. Ujilah dari contoh 2 tabel dibawah ini, tentukan full, partial dan transitive dependency
- Pecahlah tabel tersebut berdasarkan full dependency.
   Jawaban diupload di Aula dengan nama

# TugasFD\_NIM.pdf Contoh 1

CarReg	hireDate	Make	model	custNo	custName	outletNo	outletLoc
MS34 0GD	14/5/03	Ford	Focus	C100	Smith, J	01	Bearsden
MS34 0GD	15/5/03	Ford	Focus	C201	Hen, P	01	Bearsden
NS34 TPR	16/5/03	Nissan	Sunny	C100	Smith, J	01	Bearsden
MH34 BRP	14/5/03	Ford	Ka	C313	Blatt, O	02	Kelvinbridge
MH34 BRP	20/5/03	Ford	Ka	C100	Smith, J	02	Kelvinbridge
MD510PQ	20/5/03	Nissan	Sunny	C295	Pen, T	02	Kelvinbridge

# Contoh 2

Project Code	Project Project Name Manager	Project Budget	Employee No.	Employee Name	Department No.	Department Name	Hourly Rate
PC010	Reservation Mr. Ajay System	120500	\$100	Mohan	D03	Database	21.00
PC010	Reservation Mr. Ajay System	120500	\$101	Vipul	D02	Testing	16.50
PC010	Reservation Mr. Ajay System	120500	S102	Riyaz	D01	IT	22.00
PC011	HR System Mrs. Charu	500500	S103	Pavan	D03	Data base	18.50
PC011	HR System Mrs. Charu	500500	\$104	Jitendra	D02	Testing	17.00
PC011	HR System Mrs. Charu	500500	\$315	Pooja	D01	IT	23.50
PC012	Attendance Mr. Rajesh System	710700	\$137	Rahul	D03	Database	21.50
PC012	Attendance Mr. Rajesh System	710700	\$218	Avneesh	D02	Testing	15.50
PC012	Attendance Mr. Rajesh System	710700	S109	Vikas	D01	IT	20.50

# Tabel 1

1. a. CarReg, custNo, outletNo → hireDate (Full dependency)

b.  $custNo \rightarrow custName$  (Partial dependency)

c. outletNo → outletLoc (Partial dependency)

d. CarReg → Make, model (Partial dependency)

2.

CarReg	hireDate	custNo	outletNo
MS34 0GD	14/5/03	C100	01
NS34 TPR	16/5/03	C100	01
MH34 BRP	14/5/03	C313	02
MD510PQ	20/5/03	C295	02

custNo	custName
C100	Smith.J
C201	Hen.P
C313	Blatt.O
C295	Pen.T

outletNo	outletLoc		
01	Bearsden		
02	Kelvinbridge		

CarReg	Make	model
MS34 0GD	Ford	Focus
NS34 TPR	Nissan	Sunny
MH34 BRP	Ford	Ka
MD510PQ	Nissan	Sunny

### Tabel 2

- a. Department No → Department Name (Partial dependency)
  - b. Project Code → Project Name, Project Manager, Project Budget (Partial dependency)
  - c. Employee No → Employee Name, Departement No, Hourly Rate (Partial dependency)

2

Departement No	Departement Name
D03	Database
D02	Testing
D01	IT

Project Code	Project Name	Project Manager	Project Budget
PC010	Reservation System	Mr.Ajay	120500
PC011	HR System	Mrs.Charu	500500
PC012	Attendance System	Mr.Rajesh	710700

Employee	Employee	Departement	Hourly
No	Name	No	Rate
S100	Mohan	D03	21.00
S101	Vipul	D02	16.50
S102	Riyaz	D01	22.00
S103	Pavan	D03	18.50
S104	Jitendra	D02	17.00
S315	Pooja	D01	23.50
S137	Rahul	D03	21.50
S218	Avneesh	D02	15.50
S109	Vikas	D01	20.50

Project	Employee
Code	No
PC010	S100
PC010	S101
PC010	S102
PC011	S103
PC011	S104
PC011	S315
PC012	S137
PC012	S218
PC012	S109