LEMBAR KERJA PRAKTIKUM

Soal

1. Lakukan Normalisasi form berikut ini:

Wellmeadows Hospital
Patient Medication Form

Patient Number: P10034

Full Name: Robert MacDonald

Ward Number: Ward 11

Bed Number: 84

Ward Name: Orthopaedic

Drug Number	Name	Description	Dosage	Method of Admin	Units per Day	Start Date	Finish Date
10223	Morphine	Pain Killer	10mg/ml	Oral	50	24/03/04	24/04/05
10334	Tetracyclene	Antibiotic	0.5mg/ml	IV	10	24/03/04	17/04/04
10223	Morphine	Pain Killer	10mg/ml	Oral	10	25/04/05	02/05/06

- **UNF**

Patient Number	Full Name	Bed Number	Ward Number	Ward Name	Drug Number	Name	Description	Dosage	Method of Admin	Units per Day	Start Date	Finish Date
P10034	Robert MacDonald	84	Ward 11	Orthopaedic	10233	Morphine	Pain Killer	10mg/ml	Oran	50	24/03/04	24/04/05
					10334	Tetracyclene	Antibiotic	0.5mg/ml	IV	10	24/03/04	17/04/04
					10223	Morphine	Pain Killer	10mg/ml	Oral	10	25/04/05	02/05/06

- **1NF**

Patient Number	Full Name	Bed Number	Ward Number	Ward Name	Drug Number	Name	Description	Dosage	Method of Admin	Units per Day	Start Date	Finish Date
P10034	Robert MacDonald	84	Ward 11	Orthopaedic	10233	Morphine	Pain Killer	10mg/ml	Oran	50	24/03/04	24/04/05
P10034	Robert MacDonald	84	Ward 11	Orthopaedic	10334	Tetracyclene	Antibiotic	0.5mg/ml	IV	10	24/03/04	17/04/04
P10034	Robert MacDonald	84	Ward 11	Orthopaedic	10223	Morphine	Pain Killer	10mg/ml	Oral	10	25/04/05	02/05/06

- **2NF**

Medication Table

Patient Number	Drug Number	Units per Day	Start Date	Finish Date
P10034	10233	50	24/03/04	24/04/05
P10034	10334	10	24/03/04	17/04/04
P10034	10223	10	25/04/05	02/05/06

Patient Table

Patient Number	Full Name	Bed Number	Ward Number	Ward Name
P10034	Robert MacDonald	84	Ward 11	Orthopaedic

Drug Table

Drug Number	Name	Description	Dosage	Method of Admin
10233	Morphine	Pain Killer	10mg/ml	Oran
10334	Tetracyclene	Antibiotic	0.5mg/ml	IV

- **3NF**

Medication Table

Patient Number	Drug Number	Units per Day	Start Date	Finish Date
P10034	10233	50	24/03/04	24/04/05
P10034	10334	10	24/03/04	17/04/04
P10034	10223	10	25/04/05	02/05/06

Drug Table

Drug Number	Name	Description	Dosage	Method of Admin
10233	Morphine	Pain Killer	10mg/ml	Oran
10334	Tetracyclene	Antibiotic	0.5mg/ml	IV

Patient Table

Patient Number	Full Name	Bed Number	Ward Number
P10034	Robert MacDonald	84	Ward 11

Ward Table

Ward Number	Ward Name
Ward 11	Orthopaedic

2. The following is an unnormalized PATIENT record:
(PIDNO, PNAME, FAMDOCNO, DOCNAME, DOCADDR, *(APPTMT-DATE, APPTMT-TIME, CONSULTANT-NAME-CONSULTANT-PHONE, HOSPITAL, HOSPITAL-ADDR)) where * represents repeating groups of information. The business rules are:

- On any given day, a consultant attends at just one hospital
- On any given day, a patient will have only one appointment (APPTMT) with a given consultant
- Patient id numbers (PIDNO) and consultant names are unqiue
- Family doctor numbers (FAMDOCNO) and hospital names are unique
- Family doctor names (DOCNAME) and patient names (PNAME) are not unique
- Consultants have just one phone number, used as home base.

Reduce the above relation into normalized forms.

- **UNF**

PIDNO	PNAME	FAMDOCNO	DOCNAME	DOCADDR	APPTMT-DATE	APPTMT-TIME	CONSULTANT-NAME	CONSULTANT-PHONE	HOSPITAL	HOSPITAL-ADDR

- **1NF**

PIDNO	PNAME	FAMDOCNO	DOCNAME	DOCADDR	APPTMT-DATE	APPTMT-TIME	CONSULTANT-NAME	CONSULTANT-PHONE	HOSPITAL	HOSPITAL-ADDR

- **2NF**

PIDNO	PNAME

FAMDOCNO	DOCNAME	DOCADDR

CONSULTANT-NAME	CONSULTANT-PHONE	HOSPITAL	HOSPITAL-ADDR

PIDNO	FAMDOCNO	CONSULTANT-NAME	HOSPITAL	APPTMT-DATE	APPTMT-TIME

- **3NF**

PIDNO	FAMDOCNO	CONSULTANT-NAME	HOSPITAL	APPTMT-DATE	APPTMT-TIME

FAMDOCNO	DOCNAME	DOCADDR

PIDNO	PNAME

CONSULTANT-NAME	CONSULTANT-PHONE	HOSPITAL

HOSPITAL	HOSPITAL-ADDR