



POLITEKNIK NEGERI MALANG

Jl. Soekarno Hatta No.9, Kota Malang, Jawa Timur 65141

Telp : (0341) 404424, 404425 - Fax : (0341) 404420

Website : <http://www.polinema.ac.id/>

NAME : FARICHA AULIA

NRP : 2141720155

CLASS : II TI

Type : **Midterm**

Course : Database

Lecture : Annisa Puspa Kirana, M.Kom

Time : 120 minutes

TYPE B

1. Normalize this universal table below until 3NF (Score 30)

Universal table:

student_id	student_name	course_code	course_name	lecturer_code	lecture_name	score
123	Ani	DB	Database	ATW	Atif Winda, S.ST., M.Sc.	A
		PBO	Pemrograman Berorientasi Objek	PRM	Prima Ayundiyasti, S.ST., M.Sc.	B+
		MM	Multimedia	EAP	Ellanda A. Putri, S.ST., M.Sc.	B+
124	Budi	DB	Database	ATW	Atif Winda, S.ST., M.Sc.	B
		PBO	Pemrograman Berorientasi Objek	PRM	Prima Ayundiyasti, S.ST., M.Sc.	A
		MM	Multimedia	EAP	Ellanda A. Putri, S.ST., M.Sc.	B+
125	Christine	DB	Database	ATW	Atif Winda, S.ST., M.Sc.	B+
		PBO	Pemrograman Berorientasi Objek	PRM	Prima Ayundiyasti, S.ST., M.Sc.	A
		MM	Multimedia	EAP	Ellanda A. Putri, S.ST., M.Sc.	A

Answer:

1 NF :

std_id	std_name	crs_code	crs_name	lct_code	lct_name	score
123	Ani	DB	Database	ATW	Atif Winda, S.ST.,M.Sc.	A
123	Ani	PBO	Pemrograman Berorientasi Objek	PRM	Prima Ayudiyasti S.ST.,M.Sc.	B+
123	Ani	MM	Multimedia	EAP	Ellanda A. Putri S.ST.,M.Sc.	B+
124	Budi	DB	Database	ATW	Atif Winda, S.ST.,M.Sc.	B
124	Budi	PBO	Pemrograman Berorientasi Objek	PRM	Prima Ayudiyasti S.ST.,M.Sc.	A
124	Budi	MM	Multimedia	EAP	Ellanda A. Putri S.ST.,M.Sc.	B+
125	Christine	DB	Database	ATW	Atif Winda, S.ST.,M.Sc.	B+
125	Christine	PBO	Pemrograman Berorientasi Objek	PRM	Prima Ayudiyasti S.ST.,M.Sc.	A
125	Christine	MM	Multimedia	EAP	Ellanda A. Putri S.ST.,M.Sc.	A

2 NF:

- Student

std_id	std_name
123	Ani
124	Budi
125	Christine



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- Take Course

std_id	crs_code	crs_name	lct_code	lct_name
123	DB	Database	ATW	Atif Winda, S.ST.,M.Sc.
123	PBO	Pemrograman Berorientasi Objek	PRM	Prima Ayudiyasti S.ST.,M.Sc.
123	MM	Multimedia	EAP	Ellanda A. Putri S.ST.,M.Sc.
124	DB	Database	ATW	Atif Winda, S.ST.,M.Sc.
124	PBO	Pemrograman Berorientasi Objek	PRM	Prima Ayudiyasti S.ST.,M.Sc.
124	MM	Multimedia	EAP	Ellanda A. Putri S.ST.,M.Sc.
125	DB	Database	ATW	Atif Winda, S.ST.,M.Sc.
125	PBO	Pemrograman Berorientasi Objek	PRM	Prima Ayudiyasti S.ST.,M.Sc.
125	MM	Multimedia	EAP	Ellanda A. Putri S.ST.,M.Sc.

- Score

std_id	crs_code	score
123	DB	A
123	PBO	B+
123	MM	B+
124	DB	B
124	PBO	A
124	MM	B+
125	DB	B+
125	PBO	A
125	MM	A

3 NF :

- Student

std_id	std_name
123	Ani
124	Budi
125	Christine

- Course

crs_code	crs_name
DB	Database
PBO	Pemrograman Berorientasi Objek
MM	Multimedia



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- Lecture

lct_code	lct_name
ATW	Atif Winda, S.ST.,M.Sc.
PRM	Prima Ayudiyasti S.ST.,M.Sc.
EAP	Ellanda A. Putri S.ST.,M.Sc.

- Take
Course

std_id	crs_code	lct_code
123	DB	ATW
123	PBO	PRM
123	MM	EAP
124	DB	ATW
124	PBO	PRM
124	MM	EAP
125	DB	ATW
125	PBO	PRM
125	MM	EAP

- Score

std_id	crs_code	score
123	DB	A
123	PBO	B+
123	MM	B+
124	DB	B
124	PBO	A
124	MM	B+
125	DB	B+
125	PBO	A
125	MM	A



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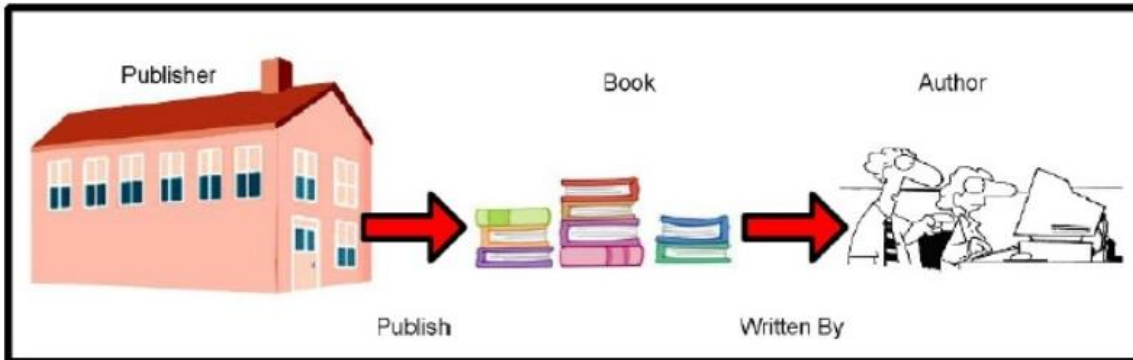
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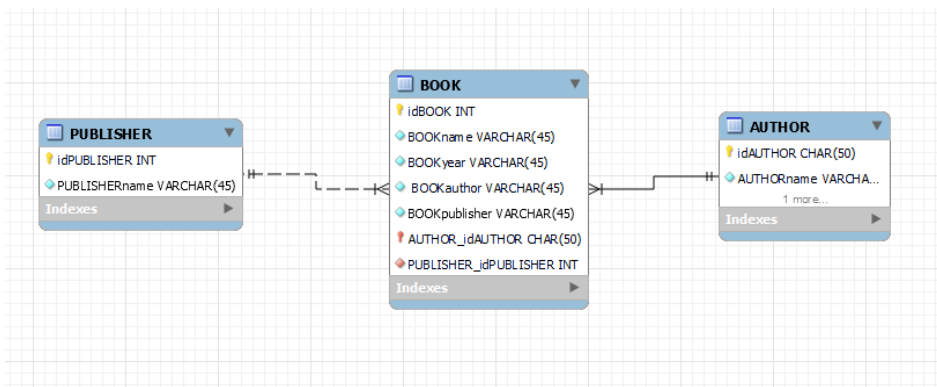
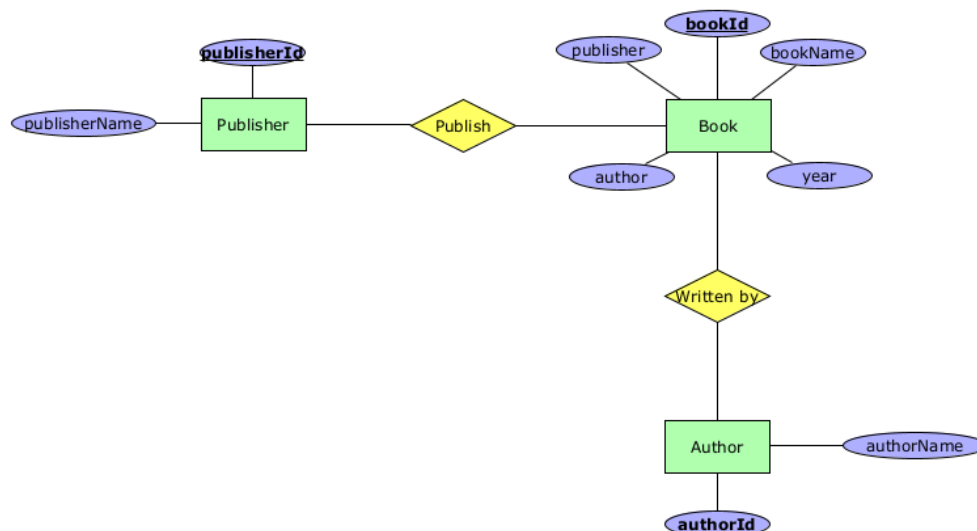
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2. Picture below show us about scenario of book publication system.

Please create ER Diagram from this scenario and convert your ER Diagram into relational scheme (Score 30)



Answer :





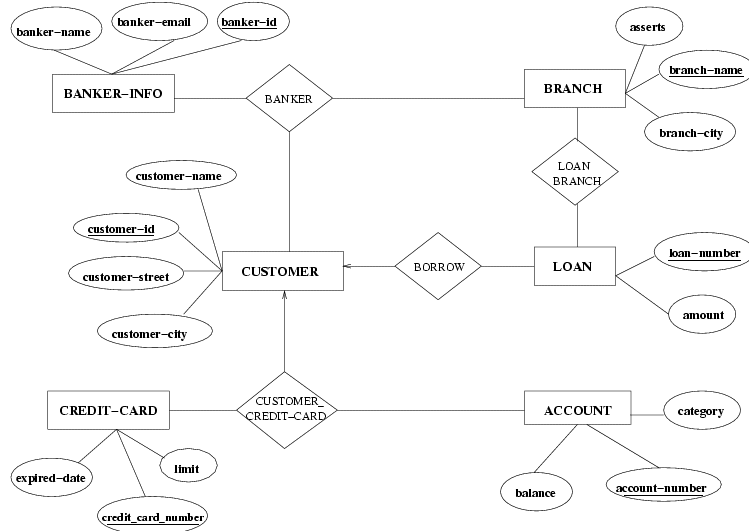
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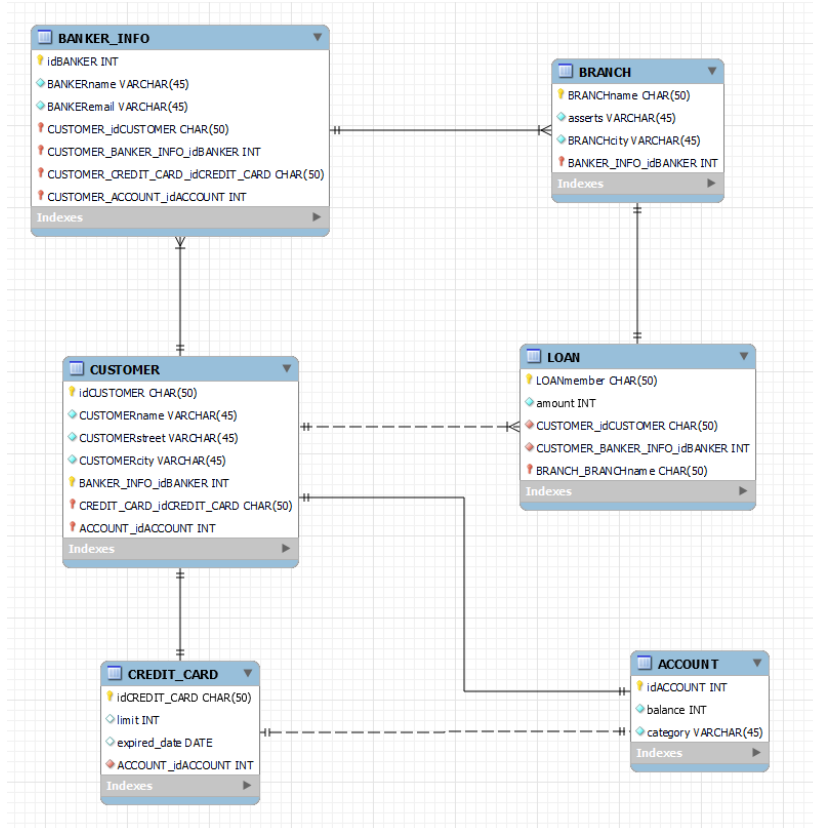
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3. Please give some explanation about ER Diagram below then convert this ERD into relational scheme (Score 40)



Answer :





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I'm very sorry ma'am because my power designer can't be opened. And the workbench has an error =(

