

WIA 2001 Database

Tutorial 4 - Normalization

Question 1

Class_Enrollment

Class code	Class Description
503	Mgt Info Systems
540	Quant Methods

Student Number and Name column are removed as one student enrolls in two classes. A 'Student' table can be created And deleting ~~the~~ ^a class can remove entire student details.

A 'Student' table can be created to connect between 'Student' and Class_Enrollment table.

Question 2

a) telNos contains two entries for one branch.

b)

branchN	branch Address	telNos
B001	8 Jefferson Way, Portland, OR	
B002	City Center Plaza, Seattle	
B003		
B004		

No:

Date:

b)

branch N	branch Address	tel Nos
B001	8 Jefferson Way, Portland, OR	503-555-3618
B001	"	503-555-2727
B002	City Center Plaza, Seattle, WA	206-555-6756
B002	"	206-555-8836
B003	14-8th Avenue, New York, NY	212-371-3000
B003		
B004	16-14th Avenue, Seattle, WA	206-555-3131
B004	"	206-555-4112

1NF
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branch - Address

branch N	tel Nos branch Address
B001	8 Jefferson Way, Portland, OR
B002	City Center Plaza, Seattle, WA
B003	14-8th Avenue, New York, NY
B004	16-14th Avenue, Seattle, WA

branch - telNos

branch N	telNos
B001	503-555-3618
B001	503-555-2727
B002	206-555-6756
B002	206-555-8836
B003	212-371-3000
B004	206-555-3131
B004	206-555-4112

2NF

Question 3

a) Table name: Book

Book (ISBN, Book Title)

<u>ISBN</u>	Book Title
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Table Name: Author

Author (Author_Num, Last Name,
Publisher)

<u>Author_Num</u>	<u>Last Name</u>	<u>Publisher</u>
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Table Name: Royalty

<u>ISBN</u>	<u>Author_Num</u>	Royalty	Edition
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b)