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Lab 04

Part 1

Case Study 1: Rad Chad's Bikes

- *Just a walkthrough, no deliverable*

Case Study 2: More Bikes

- START -- 2NF
 - OrderData (Order Num, Line, Item Number, Description, Qty Ordered, Price Each)
- 3NF
 - OrderData (Order Num, Line, Item Number, Qty Ordered)
 - OrderItem(Item Number, Description, Price Each)

Case Study 3: Books Again

PublisherID	PublisherName	BookID	BookTitle	Authors	PublishedYe	Click to Add
1	Pearson	2	Modern Database Management	Hoffer, Kamesl	2015	
		3	Data Structures and Algorithm Analysis in C++	Weiss	2014	
*		(New)			0	
2	Addison Wesley	1	Languages and Machines	Sudkamp	1997	
*		(New)			0	

- 1.
2. It's in 0NF because there are multivalued attributes in some of the author cells. In order to make it 3NF, we'd have to (1) make it 1NF by removing the multivalued attributes (by adding an additional, almost identical, line for each author) (2) make it 2NF by removing partial functional dependencies (breaking things out into tables to reduce redundancies) and (3) make it 3NF by removing functional dependencies (adding foreign keys so if I update the author of Modern Database Management I only update the author once and not multiple times).

Part 2 -- VidCast

- START:
 - Video (VideoID, Video Title, User Name, User Tier, Min Tier Followers, Stream Start, Video Duration (mins), Content Rating, Rating Description)
- 3NF:
 - Video (VideoID, User Name)
 - User (User Name, User Tier, Min Tier Followers)
 - VideoData (VideoID, Video Title, Stream Start, Video Duration (mins), Content Rating)
 - ContentRating (Content Rating, Rating Description)