Relational Databases 1(Lab)

Session 13

INST 301

Introduction to Information Science

Example of Join

Student Table

Student ID	Last Name	First Name	Department ID	email
1	Arrows	John	EE	jarrows@wam
2	Peters	Kathy	HIST	kpeters2@wam
3	Smith	Chris	HIST	smith2002@glue
4	Smith	John	CLIS	js03@wam

Department Table

Department ID	Department
EE	Electronic Engineering
HIST	History
CLIS	Information Stuides

"Joined" Table

Student ID	Last Name	First Name	Department ID	Department	email
1	Arrows	John	EE	Electronic Engineering	jarrows@wam
2	Peters	Kathy	HIST	History	kpeters2@wam
3	Smith	Chris	HIST	History	smith2002@glue
4	Smith	John	CLIS	Information Stuides	js03@wam

Car Sales ER Diagram
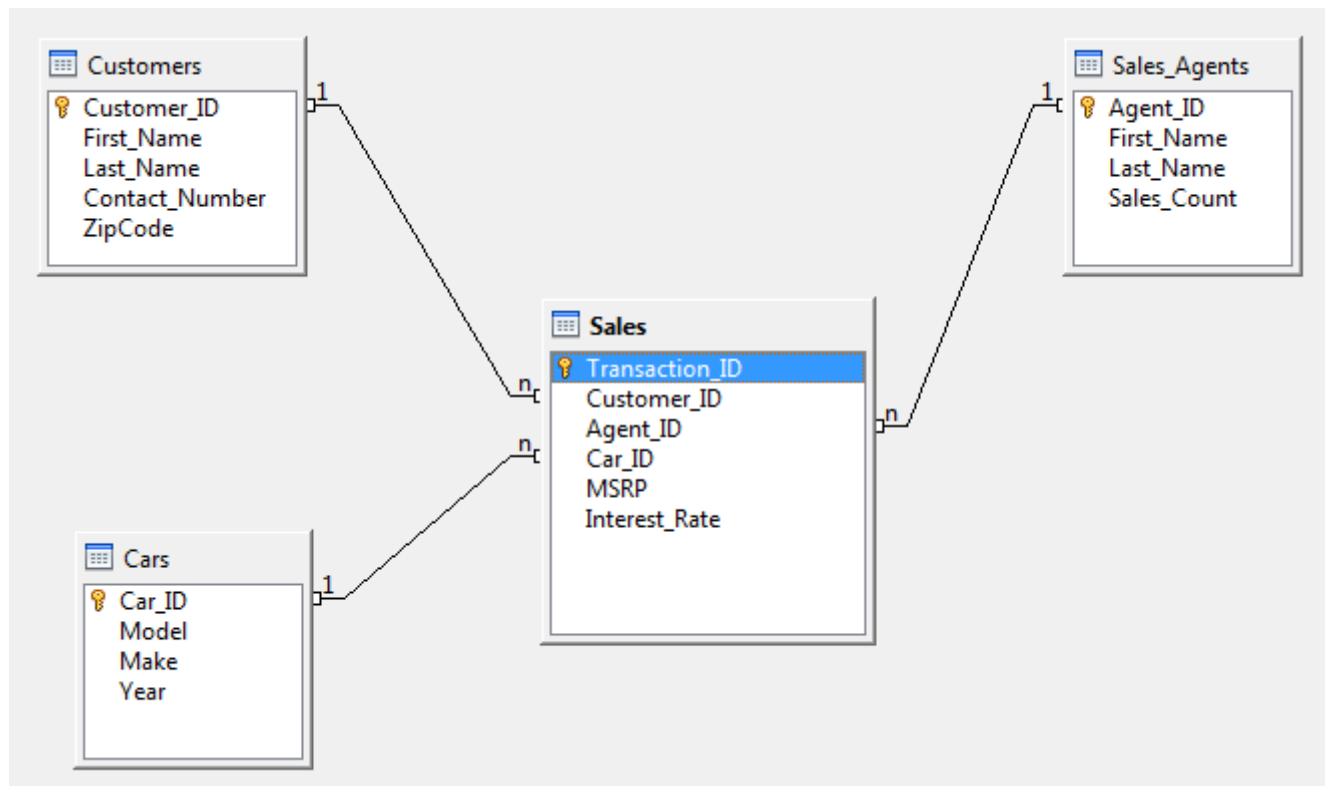
Making Tables from E-R Diagrams

- Create the Database using Apache Open Office Base Application
- Build the tables
  - One per entity
  - Plus one per M:M relationship
  - Choose terse but memorable table and field names
- Pick a primary key for each entity
- Retrieve Tuples as per the requirement

Referential Integrity

- Foreign key values must exist in other table
  - If not, those records cannot be joined

- Can be enforced when data is added
  - Associate a primary key with each foreign key

- Helps avoid erroneous data
  - Only need to ensure data quality for primary keys

Before You Go

On a sheet of paper, answer the following (ungraded) question (no names, please):

What was the muddiest point in today's class?