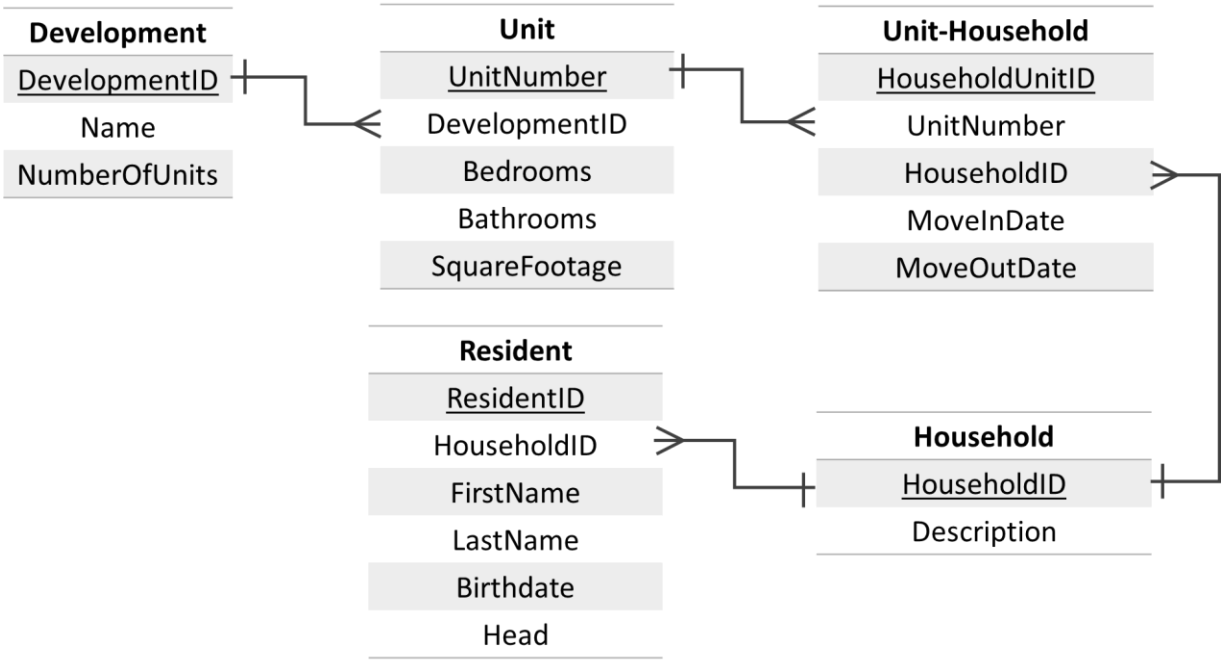
In-class Exercise: Pen-and-Paper Query Exercise

Recall our Housing Authority schema from the last in-class exercise:



Assume the database schema is called hdb (for "housing database" – clever!). So, in a query, you'll reference the Development table as hdb.Development.

In groups of three, create a single SQL query that answers each question below. Make sure you are only returning the information needed to answer the question (don't just use SELECT *).

1) Which housing units (by unit number) have more than two bathrooms?

SELECT UnitNumber FROM hdb.Unit WHERE Bathrooms > 2;

2) What is the birthdate of the resident named Tom Haverford?

SELECT Birthdate FROM hdb.Resident WHERE FirstName = 'Tom' AND LastName = 'Haverford';

3) Is Donna Meagle the head of her household?

SELECT Head FROM hdb.Resident
WHERE FirstName = 'Donna' AND LastName = 'Meagle';

4) What are the names of all heads of household (list in ascending alphabetical order by last name)?
(HINT: The field "head" can take the value "Yes" or "No")

SELECT FirstName, LastName FROM hdb.Resident WHERE Head='Yes' ORDER BY LastName ASC;

5) How many units are larger than 2000 square feet?

SELECT COUNT(*) FROM hdb.Unit WHERE SquareFootage > 2000;

6) What the least number of units in any development?

SELECT MIN(NumberOfUnits) FROM hdb.Development;

7) What is the average square footage of all units in the database?

SELECT AVG(SquareFootage) FROM hdb.Unit;

8) What is the average square footage of units by number of bedrooms (in other words, write a query that computes the average square footage of one bedroom units, two bedroom units, etc.).

SELECT AVG(SquareFootage) FROM hdb.Unit GROUP BY Bedrooms;