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.Units;**
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.Units GROUP BY Bedrooms;**