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 Unit.UnitNumber FROM hdb.Unit**

**WHERE Unit.Bathrooms > 2;
*(since we are only querying a single table, specifying “Unit” is optional)***

1. What is the birthdate of the resident named Tom Haverford?
 **SELECT Birthdate FROM hdb.Resident**

**WHERE FirstName = ‘Tom’ AND LastName = ‘Haverford’;**

1. 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”. You will need to write a WHERE condition like this:* WHERE Head=’Yes’*)***

**SELECT FirstName, LastName FROM hdb.Resident**

**WHERE Head=’Yes’**

**ORDER BY LastName ASC;**

1. How many units are larger than 2000 square feet?

**SELECT COUNT(\*) FROM hdb.Unit**

**WHERE SquareFootage > 2000;**

1. What is the average square footage of all units in the database?

**SELECT AVG(SquareFootage) FROM hdb.Unit;**
2. 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;**