Answering some questions pertaining to the states, capitals, and Bases tables in the census.accdb database.

1. While we can’t see this usage directly, in the capitals table set up a primary index using state name concatenated with state abbreviation
2. Establish the relationships between the various tables. At first, set up an inner join which is the default.
3. Write an aggregate query to determine the population of the entire 50 states in 2010. In addition, determine the population in 2010. Add a calculated field to determine the difference. This must be done on the group (query) level.
4. Write a query to list all the states alphabetically with their unique abbreviation, 2010 population and square mileage.
5. Write a query indicating the above only for those states with population above 6 million.
6. Write a query indicating the above but for those states with population below 600000
7. Write one query that shows the results of the last two queries.
8. For all the states, let’s work out density of population per square mile. After doing this, determine the density per thousand residents.
9. Write a query for all the states indicating the number of bases within each state. (And how would the different joins alter our results)
10. Write a query determining the section of the country a state picked at random is in. In class, we will pick a state based on the class’s choice.
11. List the states in that region indicating the bases and number of civilian workers for each of these states, and the population in 2010 and the abbreviation.
12. Write a crosstab query with all the states indicating the number of types of base within them
13. Extend the above query to show only those states within the specified region.
14. For all the states, determine the number of civilian workers in the military bases per million of the population. Sort by density descending. We are about to study Excel. So, for our last adventure here, let’s export to excel and create a bar chart showing our results.