CPSC 217 File Exercises

1. There is a file on the course website named `WorldSeriesWinners.txt` which contains a list of all of the World Series champions from 1903 to 2011 (note that in 1904 and 1994 there was no World Series champion). There are similar files with lists of Stanley Cup champions and Super Bowl champions. Write a program that prompts the user for the name of a data file to load and then determines the following results for that data file:
   a. Which team has won the championship in the most consecutive years?
   b. Which team went the longest between championship wins (only consider teams that have won the championship at least twice)
   c. What is the largest number of championships won by a team in a single decade? In which decade did this occur?
   d. Which decade had the most different teams win the championship?

   Ensure that your program behaves gracefully if the user provides the name of a file that does not exist.

2. On the course website there are two files that contain lists of baby names used in British Columbia in 2011. Each line in the file contains a name followed by a number which indicates the number of children given that name. Write a program that loads the data from these files and processes it. If the program is started without any command line parameters then it should display the 10 most popular boys' names and the 10 most popular girls' names along with the number of times that they were used.

   If the program is started with a command line parameter then the program should determine and display the rank of that name in the boys' list and girls' list. For example, if the command line parameter provided is `Jacob` then the program would display that this name is rank 6 for boys (since it is the 6th most popular name for boys) and that it is not generally used for girls. If the command line parameter is `Taylor` then your program should show the rank for both the boys' list and the girls' list because this name was used for both genders.