

***12.25** (*Process large dataset*) A university posts its employees' salaries at <http://cs.armstrong.edu/liang/data/Salary.txt>. Each line in the file consists of a faculty member's first name, last name, rank, and salary (see Programming Exercise 12.24). Write a program to display the total salary for assistant professors, associate professors, full professors, and all faculty, respectively, and display the average salary for assistant professors, associate professors, full professors, and all faculty, respectively.

****12.30** (*Occurrences of each letter*) Write a program that prompts the user to enter a file name and displays the occurrences of each letter in the file. Letters are case-insensitive. Here is a sample run:

```
Enter a filename: Lincoln.txt Enter
Number of A's: 56
Number of B's: 134
...
Number of Z's: 9
```

***12.31** (*Baby name popularity ranking*) The popularity ranking of baby names from years 2001 to 2010 is downloaded from www.ssa.gov/oact/babynames and stored in files named **babynameranking2001.txt**, **babynameranking2002.txt**, ..., **babynameranking2010.txt**. Each file contains one thousand lines. Each line contains a ranking, a boy's name, number for the boy's name, a girl's name, and number for the girl's name. For example, the first two lines in the file **babynameranking2010.txt** are as follows:

1	Jacob	21,875	Isabella	22,731
2	Ethan	17,866	Sophia	20,477

So, the boy's name Jacob and girl's name Isabella are ranked #1 and the boy's name Ethan and girl's name Sophia are ranked #2. 21,875 boys are named Jacob and 22,731 girls are named Isabella. Write a program that prompts the user to enter the year, gender, and followed by a name, and displays the ranking of the name for the year. Here is a sample run:

```
Enter the year: 2010 Enter
Enter the gender: M Enter
Enter the name: Javier Enter
Javier is ranked #190 in year 2010
```

```
Enter the year: 2010 Enter
Enter the gender: F Enter
Enter the name: ABC Enter
The name ABC is not ranked in year 2010
```

***13.2** (*Shuffle ArrayList*) Write the following method that shuffles an **ArrayList** of numbers:

```
public static void shuffle(ArrayList<Number> list)
```

***13.3** (*Sort ArrayList*) Write the following method that sorts an **ArrayList** of numbers.

```
public static void sort(ArrayList<Number> list)
```