IFS 104 Homework #2

The problems focus on the material presented in Chapter 2 of our textbook.
Use the concepts and examples in this chapter as your guide.
Save all your files in the `homework02` folder on your k: drive.

1. Complete "In The Lab 2 Fife's Finer Furniture" on page 133… just parts 1 & 2.

2. Complete "Cases & Places 1 Band Fund-Raising" on page 140.

3. The Four Seasons Private Living sales employees receive a base salary plus commission of 7.5% of whatever they sell during the year. The salary information for each employee (name; base salary; projected sales) is: Aart $78,000 base salary; $1,252,600 sales… Dave $123,000; $3,499,000… Bill $72,500; $1,050,000… Rick $190,000; $10,007,900… Brent $109,000; $2,352,750… Verb $83,000; $750,000.

    Develop a worksheet that calculates the commission amount and total salary for each sales employee at the Four Seasons. These formulas are:
    - Commission = 7.50% * Sales
    - Total salary = Base salary + Commission

    Calculate the total, average, lowest and highest values for each employee.

    Create a 3-D pie chart on a separate sheet showing the portion each employee's total salary contributes to the total.

4. The Bay Area Sea Lion Authority (BASLA) in San Francisco tracks and manages the sea lion population in the bay. The count sea lions floating on the barges near the piers, recording how many are pregnant and diseased. This data is in Table 1 below.

   BASLA scientists use a sophisticated formula to use this data to approximate the sea lion population in the bay:

   ```
   Total sea lions =
       1.618 * (sea lions observed + pregnant sea lions) –
          2.718 * disease rate * (sea lions obsv'd + pregnant sea lions)
   ```

   Enter the data into a worksheet and use this formula to estimate the sea lion population of each barge. Finally, these 6 barges are merely a sample of San Francisco's 256 total. Use the average sea lion population for a barge to determine the total for all the neighborhoods in the city.

BASLA Sea Lion data			
Barge Num	**Sea lions Observed**	**Sea Lions Pregnant**	**Disease Rate**
7	8	1	12%
22	12	4	8%
93	6	0	10%
144	29	7	18%
221	21	6	15%
271	14	13	22%

   Table 1

5. **Web special** – Let's import data from a cool web site. Use the `Data/Import External Data/New Web Query` menu to get started. The site I'm interested in is www.xist.org and in particular let's download the estimated population page at: http://www.xist.org/earth/population1.aspx

   Once you've imported the data:
   - Delete that row for the entire world because it'll mess up our statistics
   - Calculate the total, average, maximum and minimum for each population statistic (column)
   - Format, format, format:
     - Make the font Verdana, size all text at least 12
     - Use consistent decimal places
     - Change column widths to accommodate your data if need be
     - Make it look beautiful, of course
   - Save your work to `population.xls` on the k: drive.