Objective: Become more familiar with lists and the basics of software design. Recall from CS 120 that top-down design is a problem-solving method in which the programmer breaks a problem up into its major subproblems and then solves the subproblems using techniques such as stepwise-refinement to derive the solution to the original problem. All subproblems should translate directly into functions used by the final program.

Part 1: Write a function to display the properties (type) of each element in a list.

Part 2: The program will contain a list of animals (one line). After the list is constructed, delete animals as specified in the data file (one animal per line).

Requirements: Your program (modular) must perform the following operations:

- Construct the animal list (Try reading).
- Print the animal list.
- Display the number of each type of animal in the list.
- Remove the first animal specified from the list.
- Display the list after each specified animal is deleted.
- Display the number of each type of animal remaining in the list.

Sample:

```plaintext
pets = ["cat", "dog", "bird", "cat", "bird", "dog", "cat", "cat"]
Print( pets )
[cat, dog, bird, cat, bird, dog, cat, cat]
Print( count( pets, "cat" ) )
4
```

Deliverables:

- Program—fully documented.
- A program design sheet. Describe all classes and methods needed to implement your program.
- Programming Log:
  - Record the time required to design and implement your program.
  - Record of things you encountered/learned while implementing your program.
- Output—proof that your program worked.

If you have any questions regarding this assignment, do not hesitate to contact me. Start working on this assignment as soon as possible.