## **Numeric Data Types**

### **Overview**

Practice converting user input to numeric data types and perform calculations.

# **Assignment**

For this assignment, you'll get to practice several different examples, but they should all be part of the same program.

#### **Hint from Instructor:**

After completing part of the assignment, if you want to keep the code there, but not have it run each time, you can put a # character at the front of the line to "comment it out" or temporarily turn it into a comment. Then, if you want the code to run again, you remove the # character and it is code again.

### Write a program that does the following:

- 1.Prompt the user for their age. Convert it to a number, add one to it, and tell them how old they will be on their next birthday.
- 2.Prompt the user for the number of egg cartons they have. Assume each carton holds 12 eggs, multiply their number by 12, and display the total number of eggs.
- 3. Prompt the user for a number of cookies and a number of people. Then, divide the number of cookies by the number of people to determine how many cookies each person gets.

### Here is an example of the tasks when run:

```
How old are you? 25
On your next birthday, you will be 26
How many egg cartons do you have? 3
You have 36 eggs
How many cookies do you have? 18
How many people are there? 8
Each person may have 2.25 cookies
```

# **Testing Procedure**

Verify that your program works correctly by following each step in this testing procedure:

- 1.Run through the entire program using the inputs shown in the example above. Make sure your output matches the output shown above.
- 2. For the first question, regarding ages, try entering the ages 18 and 59 (one at a time), and ensure that the program correctly outputs the numbers 19 and 60 for the next birthdays.
- 3. For the second question, regarding eggs, try entering a 5 and 0 (one at a time), and ensure that the program outputs 60 and 0 eggs.
- 4. For the third question, regarding cookies, trying entering two more sets of values (one at a time) and make sure the division works correctly. Try one set of values that results in an even number (no decimal part) and one that results in a decimal and make sure they both work correctly.
- 5. Double check that the output matches the example output exactly, including:
  - The numeric values should appear in the middle of the other words, not on a separate line.
  - The number of spaces before and after the numbers should match the example output.
  - o There should be a blank line before each section.