

## COP2221 – Intermediate C++ Programming

### Module #5 Assignment Two

10 points

This assignment refers to **Learning Outcome #2: Create and utilize arrays to store lists of related data** – specifically you will use parallel arrays and pass arrays to functions.

### Programming Problem

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**NOTE:** it is critical that you review the VideoNote from Programming Challenge #3 – it contains **lots** of code that will assist you with this assignment.

You have been hired by the local SPCA to create a program to assist with keeping track of food costs for the kitties at the shelter. The shelter takes care of 5 cats per week. For this program, you will **initialize** an array with the kitties' names so that you do not need to keep entering this data (see Section 7.4 in the text and the above mentioned VideoNote) each time you run the program.

1. The program will begin with a welcome screen – call a welcome function explaining the purpose of the program.
2. Next, function main() will call an input function:
  - Pass the name array and the food array to the input function (remember – arrays are automatically passed by reference)
  - Create a loop to display the cat's name and have the user enter the amount (in pounds) of food the cat eats per week (the user's input will be placed into the food array so that the subscripts match the cat name with the amount of food)
    - Do not allow a negative amount for this input
3. Call a report function that produces the following information (nicely formatted):
  - Report heading
  - Total amount of cat food consumed per week
  - Total cost of cat food (the shelter pays \$4.95 per pound of food)
  - Name of the cat who eats the most food per week along with how much food is eaten
  - Name of the cat who eats the least amount of food per week along with how much food is eaten

#### 4. Call a “good-bye” function that displays the SPCA shelter information (you make this up)

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This program does **not** require a design document because the above program outlines the overall design. Use the textbook examples and the assigned VideoNote for assistance – you need to try and complete this program on your own. It is very similar to provided materials.

As with any program – include opening documentation, good programming style (readability) and a comment or two describing the purpose of any functions.