Project 04 - Monkey Food

A local zoo wants to keep track of how many pounds of food each of its three monkeys eats each day during a typical week. Write a program that stores this information in a two-dimensional 4 x 7 array, where each row represents a different monkey and each column represents a different day of the week. The program should first have the user input the data for each monkey from the keyboard. The number of pounds of food eaten by one monkey in one day should be a floating-point value.

Input Validation: Do not accept negative numbers.

Then your program should create a report that includes the following information:

- A nicely-formatted table with a row for each monkey and a column for each day of the week showing the amount of food eaten by that monkey on that day. Be sure to include row and column labels. Format all the food amounts so that they print with the same number of decimal places. This makes the decimal points line up nicely. Note: you should write a separate function to print this table.
- The average amount of food eaten per day by the whole group of monkeys. This is the total food eaten by all monkeys during the week divided by seven. Note: you should write a separate value-returning function to calculate this average.
- The least amount of food eaten on any day during the week by any one monkey. Note: you should write a separate value-returning function to find the smallest amount of food.
- The greatest amount of food eaten on any day during the week by any one monkey. Note: you should write a separate value-returning function to find the largest amount of food.

Modularity Your program must be a modular program. Your main function should not contain any loops. It should call one function to input the food amounts. It should call a separate function to print the table of food eaten. And it will call a separate value-returning function to find each of the following: average food eaten, least food eaten, and most food eaten (a total of 5 functions in addition to main()).

Additional Requirements:

- Do not use global variables in any assignment. A global variable is a variable that is declared outside any function. It is okay to use global constants.

Example

Your screen dialog might look similar to this (user input is shown in **bold**):

```
Enter pounds of food eaten by monkey 1 on Sun: 2.9
Enter pounds of food eaten by monkey 1 on Mon: 3.3
Enter pounds of food eaten by monkey 1 on Tue: 2.1
Enter pounds of food eaten by monkey 1 on Wed: 3.7
Enter pounds of food eaten by monkey 1 on Thu: 2.2
Enter pounds of food eaten by monkey 1 on Fri: 3.5
Enter pounds of food eaten by monkey 1 on Sat: 3.4

Enter pounds of food eaten by monkey 2 on Sun: 4.4
...
```

Your report might look similar to this:

```
Pounds of Food Eaten by Monkey and Day of Week

Monkey   Sun   Mon   Tue   Wed   Thu   Fri   Sat
     1   2.9   3.3   2.1   3.7   2.2   3.5   3.4
     2   4.4   4.8   4.1   3.2   5.1   2.9   2.6
     3   1.5   2.1   3.5   2.7   2.0   1.7   2.9

The average food eaten per day by all monkeys    :   9.2 pounds
The least amount of food eaten by any monkey     :   1.5 pounds
The largest amount of food eaten per by any monkey:   5.1 pounds
```