Python – Programming Assignment 7

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Directions: Write a function that tracks pet feedings. The function should compute different results depending on a mode parameter.

Specifications:

- Write a function called feeding_tracker(feedings, mode).

- The function should accept two parameters.

  - The first parameter is a dictionary where the **keys** are pet names and the **values** are lists of numbers representing how much food (in cups) the pet ate at each feeding.
  - The second parameter is a string that can be one of the following values: total, avg, most, least, or none. The default value should be total.
    * If the parameter is "total," print the **total food eaten for each pet** and return a dictionary of totals.
    * If it is "avg," print the **average amount eaten per feeding** for each pet.
    * If it is "most," print the **largest feeding amount** for each pet.
    * If it is "least," print the **smallest feeding amount** for each pet.
    * If it is "none," print a message and return the original dictionary unchanged.
    * If it is any other value, print an error message and return the original data.

- EXTRA CHALLENGE: Do **not** use the built-in Python functions sum(), max(), or min(). Instead write your own helper functions (for example my_max(), my_min()) using loops and comparisons.

- Example for testing:

  feedings = { 'Bella' : [0.5, 1.0, 0.75, 1.25, 0.5] }

  feeding_tracker(feedings,'total')

  should print:
  Bella ate a total of 4.0 cups!

  and return:
  {'Bella': 4.0}

  If we use an invalid mode like:

  feeding_tracker(feedings,'banana')

  the program should print an error and return:
  { 'Bella' : [0.5, 1.0, 0.75, 1.25, 0.5] }

  Try your program with multiple pets!