

Programming 3e

Worksheet "Sugar levels in a Meal"

This worksheet builds on Week 2 concepts

ARRAYS ARE NOT REQUIRED TO SOLVE THE PROBLEMS

Scenario A user wants to record sugar values for food items in a meal. In Task 1 the user adds the sugar value for each food item. After each value is added the user is given an option to exit or add another value. In Task 2 the user enters a maximum sugar limit for the meal.

Write all your code inside the **main()** method. You may use helper functions in the same file.

Task 1 Write a program to do the following:

- a. Create a loop that will:
 - i. Ask the user to enter a sugar level for a food item in the console window (use g for grams for the sugar value and assume sugar values are whole numbers)
 - ii. Add the sugar value entered by the user to total amount of sugar
 - iii. Display the current sugar total for the meal at the console window
 - iv. Ask the user if they want to continue or stop adding sugar values. If the user chooses to stop, exit the loop and display the final sugar total for the whole meal

Task 2 Add the following features to the program you created in Task 1:

- a. Ask the user to enter a maximum sugar value for the meal in the console window (use g for grams for the sugar value and assume sugar values are whole numbers)
- b. Inside the loop:
 - i. Add a food item's sugar value to sugar total
 - ii. If the sugar total is less than the maximum sugar value continue with loop
 - iii. If the sugar total exceeds the maximum sugar value, display the following message at the console window: "You have gone over your sugar count for this meal". Ask the user if they want to continue adding food items or stop. If the user chooses to stop, exit the loop and display the final sugar value for the meal.
 - iv. If the sugar total equals the maximum sugar allowed, exit the loop and display the sugar total for the meal at the console window