

# Documentation

## Target assessment level

Target assessment level of this work is 3.

## Specification

### What does the program do?

The program:

1. reads food data from a text file
2. distinguishes between collected and uncollected food items
3. analyzes only the collected food items
4. summarizes the user's preferences based on multiple attributes, including
  - cuisine style (European, American, Asian)
  - meal type (breakfast, lunch/dinner, dessert)
  - calorie level (high, medium, low)
  - flavour (sweet, umami, savory)
5. prints a summary of the user's food preferences based on the analysis

The user supplies the name of the input file from the keyboard.

### Data format

The input data text file consists of multiple lines.

Each line represents one food item and contains the following information in this order:

food\_name collected\_status meal\_type flavor calorie\_level cuisine\_style

Where:

1. food\_name is a string
2. collected\_status is a single word
3. cuisine\_style is a single word
4. meal\_type is one of a single word

5. calorie\_level is a single word
6. flavour is a single word

Only food items marked as collected are included in the analysis.

## **Correctness**

### **Typical test case**

File [foods.txt](#) contains data from 15 foods with different attributes, including collected status, meal type, calorie level, flavour, and cuisine style. When the program (file main.py) is run the output is correct and includes:

Give path to data file: foods.txt

Total number of foods: 15

Number of collected foods: 9

For the collected foods:

Breakfast foods: Dim\_Sum, French\_toast

Lunch/Dinner foods: Pizza, Hamburger, Spaghetti, Sushi, Cheese\_Fondue

Dessert foods: Churros, Tiramisu

Favorite cuisine style: European

Favorite calorie level: high

Favorite flavour: savory

### **Resource management**

The input file is opened using a with-statement, and will therefore be closed automatically.