

ASSIGNMENT – 1

Title: *Daily Calorie Tracker
Program*

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Section: A

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1. Introduction:

This assignment focuses on building a **Daily Calorie Tracker** using Python.

The goal of the program is to help users monitor their calorie intake throughout the day by logging meals and calculating total calories consumed. The tracker evaluates whether the user is within their daily calorie limit and generates a summary at the end of the session.

Additionally, the program allows users to save their calorie log to a text file for future reference.

2. Objectives

The main objectives of this assignment were:

- To practice **user input handling** in Python.
- To use **loops and conditional statements** effectively.
- To store and process data using **lists and variables**.
- To generate a formatted **summary report** of calorie intake.
- To implement **file handling** for saving session logs.

3. Methodology

The Daily Calorie Tracker program works as follows:

Step 1: User Input

- The user enters their **daily calorie limit**.
- The user then enters the **number of meals** they want to log.
- For each meal, the program asks:
 - Meal name
 - Calories for that meal

Step 2: Calorie Calculations

- Sum of total calories consumed.
- Average calories per meal.
- Comparison of total calories vs. user-defined limit.

Step 3: Output Display

The program displays:

- Meal names
- Calories for each meal
- Total calories
- Average calories
- Calorie limit
- A message indicating whether the user is within the limit

Step 4: File Saving

At the end:

- The user can choose to save the session.
- The file is saved in the format:
`calorie_log_YYYYMMDD_HHMMSS.txt`

4. Code Overview (Summary)

The program uses:

- **Input()** to gather user data
- **Loops** to record multiple meals
- **Lists** to store meal names and calories
- **Sum(), len()** for calculations
- **f-strings** for formatting output
- **File operations** using with open()

Each part works together to provide an interactive user experience.

5. Output Screenshots:

Welcome to the Daily Calorie Tracker!
This program helps you check your total calorie intake each day.

```
Enter your daily calorie limit: 400
How many meals would you like to log? 3
Enter meal name for meal #1: peanut butter
Enter calories for peanut butter: 200
Enter meal name for meal #2: bread
Enter calories for bread: 40
Enter meal name for meal #3: milk
Enter calories for milk: 100
```

Good job! You are within your daily calorie limit.

Calorie Intake Summary:

Meal Name	Calories
peanut butter	200
bread	40
milk	100
Total:	340
Average:	113.33
Limit:	400

Would you like to save your session log to a file? (yes/no): yes
Session log saved as: calorie_log_20251111_225352.txt

Thank you for using the Daily Calorie Tracker!

+ Ask anything

Conclusion :

The Daily Calorie Tracker successfully meets the objectives of the assignment by providing a simple, interactive system for managing calorie intake throughout the day. The program allows users to set a daily limit, record meal entries, compute total and average calories, and evaluate whether the user has stayed within their target. The inclusion of optional session-saving functionality helps users maintain ongoing records of their health patterns. Completing this assignment strengthened the understanding of Python fundamentals, including loops, conditionals, data structures, input handling, and basic file operations. Overall, the project demonstrates how programming can assist in building useful and practical real-life tools.

GitHub Links

You can view the complete source code and files for this assignment at the following GitHub repositories:

Assignment-1 GitHub Repository:

<https://github.com/arpitpaatni2007-jpg/Python-assissgnments/tree/main/Assissgnment-1>

GitHub Profile:

<https://github.com/arpitpaatni2007-jpg>