K.R. MANGALAM UNIVERSITY

THE COMPLETE WORLD OF EDUCATION



PROGRAMMING FOR PROBLEM SOLVING USING PYTHON

B.TECH CSE CORE SECTION (A) SEMESTER - 1

COURSE CODE: ETCCPP102

ASSIGNMENT NO.: 1

ASSIGNMENT TITLE: DAILY CALORIE TRACKER

SUBMITTED BY: MANPREET KAUR

SUBMITTED TO: FEROZ AHMAD SIR

DATE OF SUBMISSION: 20 OCTOBER 2025

DAILY CALORIE TRACKER:

> <u>INTRODUCTION</u>:-

The "Daily Calorie Tracker" program takes input from the user of their number of meals taken and then it loops according to the user input multiple times. Then it takes the input from the user of the meal name and the amount of calories in the meal. After taking all these inputs it appends the meal names in a separate list and the amount of calories in a separate list. Then it calculates the total calories and average calories. It also takes another input from the user to enter the daily calories limit, So that it can compare the amount of calories taken in the day with the daily calorie limit and print messages accordingly. After all this, it will print total calories taken, average calories taken and a table showing all the meal names and their corresponding calories.

► TASK-1 :- SET UP AND INTRODUCTION :-

```
'''NAME: MANPREET KAUR
  COURSE: B. TECH CSE CORE
  SECTION: A
  SEMESTOR: 1
  SUBJECT: PROGRAMMING FOR PROBLEM SOLVING USING PYTHON
  COURSE CODE: ETCCPP102
  ROLL NO.: 2501010070
  PROJECT TITLE: DAILY CALORIE TRACKER
  DATE OF SUBMISSION: 20 OCTOBER 2025
  SUBMITTED BY: MANPREET KAUR
  SUBMITTED TO: FEROZ AHMAD SIR
# TASK-1 :- Set up and Introduction
print("Welcome to our daily calorie tracker !!")
print("This program will take user input of the meal name and its calories \
and after this the program will return the Total calories taken, the average \
calories of your daily meal intake. This program will also return the \
table containing the meal name and its corresponding calories.")
```

```
In [4]: %runfile 'C:/Users/MANPREET KAUR/Desktop/PYTHON/daily_calorie_tracker/tracker.py' --wdir Welcome to our daily calorie tracker!!

This program will take user input of the meal name and its calories and after this the program will return the Total calories taken, the average calories of your daily meal intake. This program will also return the table containing the meal name and its corresponding calories.

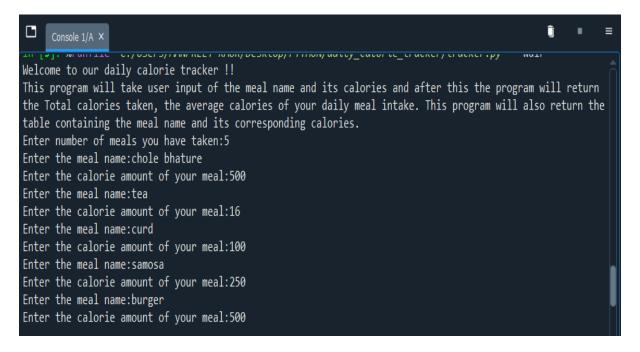
In [5]:

[Python Console History]
```

In Task-1 we have to do set up and introduction, here in the above screenshot under the input heading, I have added a multi-line comment showing all my details and under the comment Task-1 I have added a print statement which will print the welcome message and the introduction about the "Daily Calorie Tracker" and in the second screenshot under the output heading you can see the output of the above code.

► TASK-2 :- INPUT AND DATA COLLECTION :-

```
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print("This program will take user input of the meal name and its calories \
and after this the program will return the Total calories taken, the average \
calories of your daily meal intake. This program will also return the \
table containing the meal name and its corresponding calories.")
# TASK-2 :- Input and data collection
num_meal=int(input("Enter number of meals you have taken:")) # user will enter the number of meals taken in a day.
cpnum_meal=num_meal # Creating a copy of num_meal for calculating average
meal_lst=[] # an empty list for storing the values of the meals taken.
calorie_lst=[] # an empty list for storing the values of the calories of the corresponding meal.
while num_meal>0: # loops for taking input from the user.
    meal_name=input("Enter the meal name:") # input meal name.
    calorie_amt=float(input("Enter the calorie amount of your meal:")) # input its amount of calories.
    meal_lst.append(meal_name) # adding the meal names into an empty list meal_lst.
    calorie_lst.append(calorie_amt) # adding the corresponding amount of calories to an empty list calorie_amt.
    num_meal=num_meal-1 # decreasing the num_meal value by one after entering one entity.
```

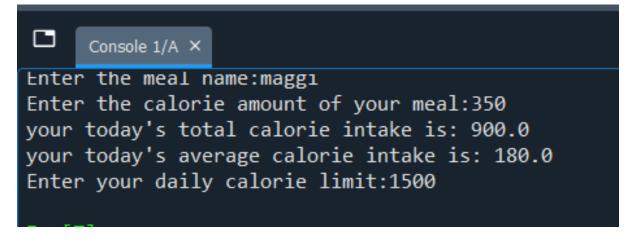


In Task-2 we have to do input and data collection, here in the above screenshot under the input section Task-2 I have taken input from the user that how many meals he/she has taken in the day. After that, I have copied the variable so that I can easily do further operations. Then I have created two lists one for storing the meals and other for storing their corresponding calories. Then I have run a while loop, this loop will run the number of times equal to the number of meals taken in the day. When the loop runs and user enter their data, the meal names are stored in a separate list and the amount of calories corresponding to the meal name. In the last line of the code I have decreased the value of number of meals taken by the user by 1, so that we can enter the data a certain number of times. For example:— If user have taken 5 meals then the loop will run five times. This statement is used to give step value to the while loop or to do increment or decrement.

> TASK-3 :- CALORIE CALCULATIONS :-

```
3
        '''NAME: MANPREET KAUR
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        # TASK-1 :- Set up and Introduction
        print("Welcome to our daily calorie tracker !!")
       print("This program will take user input of the meal name and its calories \ and after this the program will return the Total calories taken, the average \
        calories of your daily meal intake. This program will also return the \
        table containing the meal name and its corresponding calories.")
        # TASK-2 :- Input and data collection
        num_meal=int(input("Enter number of meals you have taken:")) # user will enter the number of meals taken in a day.
       cpnum_meal = num_meal # Creating a copy of num_meal for calculating average
meal_lst=[] # an empty list for storing the values of the meals taken.
        calorie_lst=[] # an empty list for storing the values of the calories of the corresponding meal.
        while num_meal>0: # loops for taking input from the user.
            meal_name=input("Enter the meal name:") # input meal name.
calorie_amt=float(input("Enter the calorie amount of your meal:")) # input its amount of calories.
            meal_lst.append(meal_name) # adding the meal names into an empty list meal_lst.
            calorie_lst.append(calorie_amt) # adding the corresponding amount of calories to an empty list calorie_amt.
            num_meal=num_meal-1 # decreasing the num_meal value by one after entering one entity.
        tot_calorie=sum(calorie_lst)
        avg_calorie=tot_calorie/cpnum_meal # calculating the average amount of calories.
        print("your today's total calorie intake is:",tot_calorie)
        print("your today's average calorie intake is:",avg_calorie)
calorie_limit=float(input("Enter your daily calorie limit:"))
```

```
Û
In [6]: %runfile 'C:/Users/MANPREET KAUR/Desktop/PYTHON/daily_calorie_tracker/tracker.py' --wdir
Welcome to our daily calorie tracker !!
This program will take user input of the meal name and its calories and after this the program will return
the Total calories taken, the average calories of your daily meal intake. This program will also return the
table containing the meal name and its corresponding calories.
Enter number of meals you have taken:5
Enter the meal name:chappati
Enter the calorie amount of your meal:100
Enter the meal name:curd
Enter the calorie amount of your meal:100
Enter the meal name:rice
Enter the calorie amount of your meal:200
Enter the meal name:gulab jamun
Enter the calorie amount of your meal:150
Enter the meal name:maggi
Enter the calorie amount of your meal:350
```



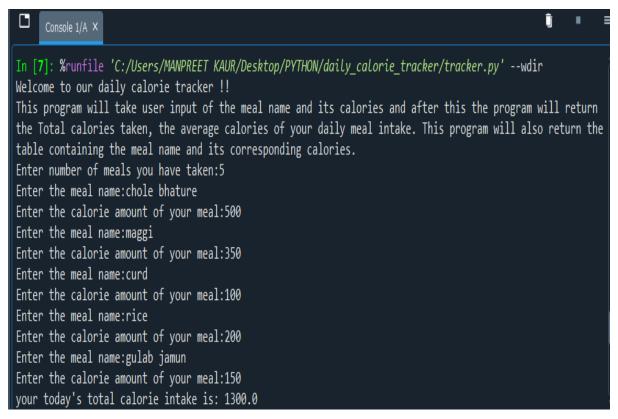
In Task-3 we have done the calorie calculations, I have calculated the total number of calories taken in the day by using sum() function. Them I have calculated the average calories by dividing the total calories to the number of meals taken in the day. After that I have printed the result of both the total calories and the average calories by using the print() function. Then I have taken the input that what is the user's daily calories limit for further comparing.

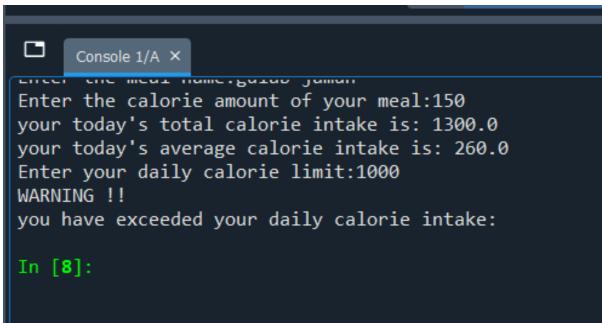
> TASK-4 :- EXCEED LIMIT WARNING SYSTEM :-

In Task-4 I have made the exceed limit warning system, in which I have used the if else statements to compare the total calories taken by the user to the daily calorie limit inputted by the user.

In if statement, if the total calories consumed by the user is greater than the daily calorie limit inputted by the user then it will print the warning message otherwise it will print the motivational message to stay committed.

```
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table containing the meal name and its corresponding calories.")
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cpnum_meal=num_meal # Creating a copy of num_meal for calculating average
meal lst=[] # an empty list for storing the values of the meals taken.
calorie_lst=[] # an empty list for storing the values of the calories of the corresponding meal.
while num meal>0: # loops for taking input from the user.
    meal_name=input("Enter the meal name:") # input meal name.
    calorie_amt=float(input("Enter the calorie amount of your meal:")) # input its amount of calories.
    meal_lst.append(meal_name) # adding the meal names into an empty list meal lst.
    calorie 1st.append(calorie amt) # adding the corresponding amount of calories to an empty list calorie amt.
    num_meal=num_meal-1 # decreasing the num_meal value by one after entering one entity.
# TASK-3 :- Calorie Calculations
tot_calorie=sum(calorie_lst)
avg_calorie=tot_calorie/cpnum_meal # calculating the average amount of calories.
print("your today's total calorie intake is:",tot_calorie)
print("your today's average calorie intake is:",avg calorie)
calorie_limit=float(input("Enter your daily calorie limit:"))
# TASK-4 :- Exceed limit warning system
if tot_calorie>calorie_limit:
    print("WARNING !!")
    print("you have exceeded your daily calorie intake:")
    print("HURRAY !!")
    print("you have completed your target.")
```





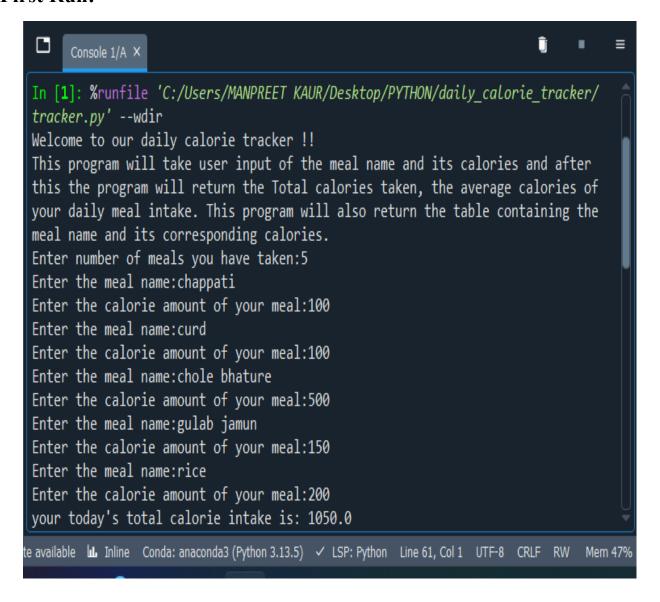
► TASK-5 :- **NEATLY FORMATTED OUTPUT** :-

In Task-5 I have to display the output in the tabular form in neat way so I have run a loop and printed the output in tabular form along with the total calories consumed and the average calories consumed.

```
tracker.py X
   '''NAME: MANPREET KAUR
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  # TASK-1 :- Set up and Introduction
  print("Welcome to our daily calorie tracker !!")
  print("This program will take user input of the meal name and its calories \
   and after this the program will return the Total calories taken, the average \
   calories of your daily meal intake. This program will also return the \
   table containing the meal name and its corresponding calories.")
   # TASK-2 :- Input and data collection
   num meal=int(input("Enter number of meals you have taken:")) # user will enter the number of meals taken in a day.
   cpnum meal=num meal # Creating a copy of num meal for calculating average
   meal_lst=[] # an empty list for storing the values of the meals taken.
   calorie lst=[] # an empty list for storing the values of the calories of the corresponding meal.
   while num_meal>0: # loops for taking input from the user.
      meal name=input("Enter the meal name:") # input meal name.
      calorie amt=float(input("Enter the calorie amount of your meal:")) # input its amount of calories.
      meal lst.append(meal name) # adding the meal names into an empty list meal lst.
      calorie lst.append(calorie amt) # adding the corresponding amount of calories to an empty list calorie amt.
      num meal=num meal-1 # decreasing the num meal value by one after entering one entity.
   # TASK-3 :- Calorie Calculations
   tot calorie=sum(calorie lst)
   avg_calorie=tot_calorie/cpnum_meal # calculating the average amount of calories.
   print("your today's total calorie intake is:",tot_calorie)
   print("your today's average calorie intake is:",avg calorie)
   calorie_limit=float(input("Enter your daily calorie limit:"))
   # TASK-4 :- Exceed limit warning system
```

The 3 different outputs of the complete code is shown below:-

1. First Run:-



```
your today's total calorie intake is: 1050.0
your today's average calorie intake is: 210.0
Enter your daily calorie limit:2000
HURRAY
       1.1
you have completed your target.
MEAL NAME
                      CALORIES
                       100.0
chappati
curd
                       100.0
chole bhature
                       500.0
                       150.0
gulab jamun
                       200.0
rice
Total calories
                       1050.0
Average calories 210.0
```

2. Second Run:-

```
Console 1/A ×
In [2]: %runfile 'C:/Users/MANPREET KAUR/Desktop/PYTHON/daily calorie tracker/
tracker.py' --wdir
Welcome to our daily calorie tracker !!
This program will take user input of the meal name and its calories and after
this the program will return the Total calories taken, the average calories of
your daily meal intake. This program will also return the table containing the
meal name and its corresponding calories.
Enter number of meals you have taken:5
Enter the meal name:samosa
Enter the calorie amount of your meal:350
Enter the meal name: shahi paneer
Enter the calorie amount of your meal:350
Enter the meal name:butter naan
Enter the calorie amount of your meal:300
Enter the meal name:maggi
Enter the calorie amount of your meal:360
Enter the meal name:pizza
Enter the calorie amount of your meal:300
your today's total calorie intake is: 1660.0
e available և Inline Conda: anaconda3 (Python 3.13.5) 🗸 LSP: Python Line 61, Col 1 UTF-8 CRLF RW Mem 47%
```

```
your today's total calorie intake is: 1660.0
your today's average calorie intake is: 332.0
Enter your daily calorie limit:2000
HURRAY !!
you have completed your target.
MEAL NAME
                  CALORIES
                    350.0
samosa
shahi paneer
                    350.0
butter naan
                    300.0
maggi
                    360.0
pizza
                    300.0
Total calories
                    1660.0
Average calories
                    332.0
```

3. Third Run:-

```
Console 1/A ×
In [3]: %runfile 'C:/Users/MANPREET KAUR/Desktop/PYTHON/daily_calorie_tracker/
Welcome to our daily calorie tracker !!
This program will take user input of the meal name and its calories and after
this the program will return the Total calories taken, the average calories of
your daily meal intake. This program will also return the table containing the
meal name and its corresponding calories.
Enter number of meals you have taken:5
Enter the meal name:dal makhni
Enter the calorie amount of your meal:330
Enter the meal name:missi roti
Enter the calorie amount of your meal:160
Enter the meal name:curd
Enter the calorie amount of your meal:100
Enter the meal name:kadai paneer
Enter the calorie amount of your meal:350
Enter the meal name:buttermilk
Enter the calorie amount of your meal:40
your today's total calorie intake is: 980.0
```

```
Enter the calorie amount of your meal:350
Enter the meal name:buttermilk
Enter the calorie amount of your meal:40
your today's total calorie intake is: 980.0
your today's average calorie intake is: 196.0
Enter your daily calorie limit:2000
HURRAY !!
you have completed your target.
MEAL NAME
                   CALORIES
dal makhni
                    330.0
missi roti
                    160.0
curd
                    100.0
                    350.0
kadai paneer
buttermilk
                    40.0
Total calories
                    980.0
Average calories
                    196.0
```

