Chapter 9 Dictionary and Sets

Number of Steps

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Instructions:

You will be tracking the number of steps someone takes each day for a week. Using a loop, ask them to enter the date and the number of steps. At the end of the program, you will display the total number of steps taken, the day with the most steps, and the day with the least steps. Print multiple days if they are tied.

 Hint Use separate loops to display the days for the minimum and maximum values.

Data:

Variables:

* Days: array of days
* Steps: dictionary. Has form “Day”: Int
* Total\_steps: Int, cumulation of steps from each day

Processing:

1. Loop through days and get the user’s number of steps
2. Add it to the steps dictionary, with form “Day”: # of steps
3. Add number of steps to total\_steps
4. Display total steps
5. Display average
6. Find minimum number of steps
7. Find maximum number of steps
8. Loop through steps to find which days have the min or max number of steps
9. Display results to user

Output:

1. Ask user for the number of steps each day
2. Display total number of steps
3. Display average number of steps
4. Display the minimum number of steps and which days that occurred
5. Display the maximum number of steps and which days that occurred.

Example:

Please enter the number of steps taken on Sunday: 5000

Please enter the number of steps taken on Monday: 6000

Please enter the number of steps taken on Tuesday: 7000

Please enter the number of steps taken on Wednesday: 8000

Please enter the number of steps taken on Thursday: 5000

Please enter the number of steps taken on Friday: 6000

Please enter the number of steps taken on Saturday: 7000

You walked a total of 44,000 steps during the week.

That was an average of 6,286

The minimum steps you took were 5000 on

------ Sunday

------ Thursday

The maximum steps you took were 8000 on

------ Wednesday