

CSE 1300

ASSIGNMENT 4

Python Programming – Practice with Variables, Loops, and Conditionals

Overview

This assignment helps you practice Python basics including arithmetic operations, loops, and condition checking. You will write short Python programs for each part and submit both the code and output.

The theme for this assignment is Fitness & Steps Tracking, connecting programming concepts to real-world applications.

Part A: Arithmetic & Formatting

Task:

Write a Python program that asks the user to enter the steps walked in the morning and the steps walked in the evening.

- Calculate the total steps.
- Calculate the average steps per walk.
- Display both results formatted with no decimal places.

Example Output:

```
Enter steps in the morning: 3500
Enter steps in the evening: 4200
Total steps = 7700
Average steps per walk = 3850
```

Part B: For Loop Pattern

Task:

Write a Python program that prints a multiplication table for 5 using a loop.

Example Output:

```
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50
```

Hint: Use a for loop with `range()`.

Part C: Steps Goal Checker (Conditionals)**Task:**

Write a Python program that asks the user to enter the steps walked in a day.

- If the steps are less than 5000, print: "You need to walk more."
- If the steps are between 5000 and 10000 (inclusive), print: "Good job!"
- If the steps are greater than 10000, print: "Excellent! You are very active."

Example Output:

```
Enter steps today: 3200
You need to walk more.
```

```
Enter steps today: 8500
Good job!
```

```
Enter steps today: 12000
Excellent! You are very active.
```

Submission Requirements

- Submit a Word document with your Python code for each part.
- Include screenshots of your program output for each part.
- Submit your work on D2L under the *Assignments* tab before the deadline.