No. of Pages	2
No. of Questions	2
Total Marks	20
Time: 60 minutes	

Department of Computer Science and Engineering
MIDTERM EXAMINATION SPRING 2023
CSE 110: Programming Language I

- ✓ Write theory teacher's Initial and SET number on top of the answer script.
- ✓ Answer all questions. Use **back part** of the answer script for rough work.
- ✓ Answer Question **1** at the **beginning part** of the answer script.
- ✓ Figure in bracket [] next to each question indicates marks for that question.
- ✓ At the end of exam, put **question paper** inside answer script and **return both**.
- ✓ Understanding the question is part of the exam, **please do not ask questions**.

No washroom breaks

Section: ___ ID: _____ Name in CAPITAL: _____

Question 1 [CO6] [10 Points]
[Answer on the answer-script]

Suppose you are a part of a football team that took part in N number of football games. Write a Python program that calculates your team's **total points** and **winning percentage** based on the scores from the games. First, the program should take the number of games played as input from the user. The scores of the games should also be taken as input from the user in the following format: *(Your team's score-Opponent team's score)*. For each win, draw, and loss, your team will receive 3, 1, and 0 points, respectively. The program should then calculate your team's total points and the winning percentage. You may assume the number of goals scored in each game will always be less than 10.

Sample Input 1: 4 5-2 3-3 1-4 2-1	**Sample Input 2:** 6 2-1 1-0 4-4 3-2 0-3 3-2
Sample Output 1: Total points: 7 Winning percentage: 50.0%	**Sample Output 2:** Total points: 13 Winning percentage: 66.67%
Explanation: The first input from the user is 4 which means that 4 games were played. Your team won 2 games (game 1 & 4), drew 1 game (game 2) and lost 1 game (game 3). Therefore, total points: 3*2 + 1*1 + 0*1 = 7 Winning percentage: 2/4*100 = 50.0%	**Explanation:** The first input from the user is 6 which means that 6 games were played. Your team won 4 games (game 1, 2, 4 & 6), drew 1 game (game 3) and lost 1 game (game 5). Therefore, total points: 3*4 + 1*1 + 0*1 = 13 Winning percentage 4/6*100 = 66.67%

Question 2 [CO4] [10 Points]

[Answer on the question paper]

Illustrate the outputs of the following statements. Provide your workings on the answer script to verify your outputs. Your answer will not be accepted without the workings. All of the outputs must be in the question paper.

1	`str1 = "CSE110MidtermTracing"`
2	`x = 2`
3	`y = 1`
4	`z = 15`
5	`result = 0`
6	`while (x < 10):`
7	`    z -= 1`
8	`    y = z`
9	`    while (y > 10):`
10	`        if y % 2 == 0:`
11	`            result = (result + y // 4 + x + 3)`
12	`            print(str1[result//5])`
13	`        else:`
14	`            result = x // 3 + result + y`
15	`            print(str1[result//10])`
16	`        y -= 1`
17	`    x += 1`

Output