**Assignment 1: Chapter 1 - An Overview of Computers and Programming Languages**

**Total Points:** 100**; and Deadline:** January/26/2023, 11:59 PM.

**Note – Cheating and Plagiarism**: Cheating and plagiarism are not permitted in any form and cause certain penalties. The instructor reserves the right to fail culprits.

**Deliverable**: All your responses to the assignment questions should be included in a single compressed file to be uploaded to the Gannon University (GU) – Blackboard Learn environment.

**Question 1 (30 pts.).** Provide short answers for the following questions.
   A. Which hardware component performs arithmetic and logical operations?
   B. Which number system is used by a computer?
   C. What is linking?
   D. What is programming?
   E. What is an algorithm?

**Question 2 (30 pts.).** Design an algorithm to find the weighted average of four test scores. The four test scores and their respective weights are given in the following format: `testScore weightTestScore`.

**Hint for Q2 (Example):** The algorithm to find the perimeter and area of the rectangle is as follows:
   a) Get the length of the rectangle.
   b) Get the width of the rectangle.
   c) Find the perimeter using the following equation: `perimeter = 2 · (length + width)`.
   d) Find the area using the following equation: `area = length · width`.

**Question 3 (40 pts.).** Write a program in C++ programming language to perform the following tasks.
   A. Get the length of a rectangle from user.
   B. Get the width of a rectangle from user.
   C. Calculate the perimeter.
   D. Calculate the area.
   E. Show the perimeter and area to user.