Homework 8 *(due: Apr 08)*
Machine Learning - COSC 4360

Department of Computer Science and Electrical Engineering

Spring 2025

Exercises

*Create a **New Project** for every exercise. Take a screenshot of the source code along with its output and place the **source code** and the **screenshot** in a **zipped folder** named **LastNameFirstName_HW8***

Exercise 1 *(Optional)*

Given a list of numbers, e.g., 2, 2, 3, 4, 5, find the **minimum** value that is *not repeated*. In the given example, the **minimum** value is 3 (2 is repeated).

Note: You algorithm should work for any list *irrespective* of its length. Faster **execution time** algorithms are preferred.

Exercise 2 *(Optional)*

Given a list of numbers, e.g., 3, 5, 1, 1, 8, find two *equally* balanced **subsets** whose sum is the same. In the given example, the two *equally* balanced subsets are: 3, 5, 1 and 1, 8, both subsets sum to 9.

Note: You algorithm should work for any list *irrespective* of its length. Faster **execution time** algorithms are preferred.

Exercise 3 *(Optional)*

Find an analytical or a computational solution to **Problem 1.12 - Digital Problem** found in p. 8 of the book: *The Colossal Book of Short Puzzles and Problems* by Martin Gardner. The correct answer is given in p. 23.

Note: Submit through **Canvas**