

## Solutions to CS511 Homework 08

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**Exercise 1. [LCS, page 159-160]: Exercise 2.2.3. Do both part (a), on page 159, and part (b), on page 160.**

**Part a**

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**Solutions to ...:**

Solu start

Actual solution

Explanation:

## Part b

## Solutions to ...:

Solu start

Actual solution

Explanation:

## **Exercise 2.**

**Hint:** Review the hint in the preceding exercise

**Part 1:** [LCS, page 160]: **Exercise 2.3.2.**

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**Part 2: [LCS, page 160]: Exercise 2.3.3, modified as follows. Change part (c) to read “at least three distinct elements”.**

**PROBLEM 1** Open EML.Chapter 6.pdf. Do part Exercise 99 on page 61.

Problem title

## ON LEAN-4

**Solutions in one file at:** [https://github.com/nich-ikech/CS511-hw-macbeth/blob/main/cs511HwSolutions/hw08/hw08\\_nicholas\\_ikechukwu.lean](https://github.com/nich-ikech/CS511-hw-macbeth/blob/main/cs511HwSolutions/hw08/hw08_nicholas_ikechukwu.lean)

**Exercise 3. Two closely related parts, which you have to do in Lean:**

### **Solutions**

[https://github.com/nich-ikech/CS511-hw-macbeth/blob/main/cs511HwSolutions/hw08/hw08\\_nicholas\\_ikechukwu.lean](https://github.com/nich-ikech/CS511-hw-macbeth/blob/main/cs511HwSolutions/hw08/hw08_nicholas_ikechukwu.lean)

## Exercise 4. From Macbeth's book

[https://github.com/nich-ikech/CS511-hw-macbeth/blob/main/cs511HwSolutions/hw08/hw08\\_nicholas\\_ikechukwu.lean](https://github.com/nich-ikech/CS511-hw-macbeth/blob/main/cs511HwSolutions/hw08/hw08_nicholas_ikechukwu.lean)



## **PROBLEM 2. From Macbeth's book**

### **Solution**

[https://github.com/nich-ikech/CS511-hw-macbeth/blob/main/cs511HwSolutions/hw08/hw08\\_nicholas\\_ikechukwu.lean](https://github.com/nich-ikech/CS511-hw-macbeth/blob/main/cs511HwSolutions/hw08/hw08_nicholas_ikechukwu.lean)