**CSE 212 – Programming with Data Structures**

**W01 Prove – Response Document**

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| **Date:** | 09/16/2023 |
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**Question 1: For the rotate right problem, provide a description of how you solved the problem.**

To solve this problem, I have done the following:

First, we must determine the exact quantity of list elements that we are going to rotate. To do this, we must calculate the effective rotation quantity by taking the modulus (%) of the quantity with the length of the data list. This ensures that if the rotation amount is greater than the list length, it will wrap and provide a valid rotation amount.

Second, we must use list splitting to split the list of data into two sublists:

***- rotated\_part:*** This sublist contains the last effective\_rotated\_quantity elements of the original list. These items will become the first items in the rotated list.

***- remaining\_part:*** This sublist contains all elements of the data list except the rotated\_part. These elements will follow the rotated part in the rotated list.

Third and final step we must concatenate the ***rotated\_part*** and ***remaining\_part*** sublists to create the rotated list.

**Question 2: For the rotate right problem, draw a picture of how you solved the problem.**

A screenshot of a math form

Description automatically generated

Remember: You need to submit the following code files in addition to this document:

* 01-prove\_multiples\_of.py
* 01-prove\_rotate\_list\_right.py