**CSE 212 – Programming with Data Structures**

**W01 Prove – Response Document**

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**Question 1: For the rotate right problem, provide a description of how you solved the problem.**

**I used list slicing to cut the elements by the number given and then concatenated the two sliced lists to get the correct output. Using [:-1] returns the last number in the list and [-1:] returns the whole list except the last number. The number refers to the index and the negative shifts the indexes to start at the end of the list, so for the number 5, [:-5] it returns all the elements up to the 5th index.**

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

[-1:] [:-1]

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1 | 0 |

**Index**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

Then concatenating the two returns the solution

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 9 | + | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |

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