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COMSC 140 Python

Program Documentation for

As7\_7\_Shuffle\_two\_lists

1/ Link

<https://github.com/DVC-COMSC/assignment-7-7-enduringwriter/blob/main/main.py>

2/ Program Purpose  
This program shuffles two lists by alternating elements from each list.

Once a list is exhausted, remaining elements from the other list, if any,

are copied to the end of the result.

Assumptions:

3/ Input/Output Description  
Input: list of integers.  
Output: shuffled list with alternating elements from the lists.

4/ Explanation of All Variables

num1 = first list

num2 = second list

shuffle = list to store the shuffled result

i, j = counters num1, num2

5/ Flow Chart  
Start > Input 2 lists of integers > Initialize counters and declare variable for empty list of the shuffled result > Loop through both lists appending alternately elements from each list into the shuffled list > Extend the remainder of a list to the shuffled list, if applicable, but using index and slice rather than one by one > Output shuffled list > End

6/ Lesson Learned  
Learn to alternate elements from a list using loop and counter. Learned to use index and slice to add remaining elements rather than one by one with a while or for loop.

7/ Errors

* Used while loop expression for for loop
* Did not increment counters i, j
* Added increment counter to remaining elements when I should not have
* Utilized loop and slice for remaining elements, which was not needed