Keith Yrisarri Stateson

COMSC 140 Python

Program Documentation for Midterm 2 Q1 Split List with Pivot Value

1/ Link  
<https://github.com/DVC-COMSC/midterm-2-question-1-enduringwriter/blob/main/main.py>

2/ Program Purpose  
This program splits the list values based on the pivot value, which is the last element of the list. See docstring in main.py file.

Assumption: None.

3/ Input/Output Description  
Input: List of integers.  
Output: A list where numbers less than the pivot are placed on the left side of the pivot, the pivot in the middle, and all other elements on the right side of the pivot.

4/ Explanation of All Variables

number = list of numbers provided  
pivot = pivot number, which is the last number in the list

left/right = lists for numbers less/greater than pivot number

5/ Flow Chart  
Start > Extract pivot which is the last element in number list> Initialize empty lists for left and right > Loop through the list except the last element > Compare each number in the list with the pivot and append it in the appropriate left or right > Concatenate left, [pivot], and right lists > Print the final list > End.

6/ Lesson Learned  
Define a function, use index and append to split lists, convert an individual number to a list using brackets, and return the modified list.

7/ Errors

Missed second set of [] brackets for second variable in the declare variable line.