Array Assignments.

1. Write the code for the following problem. Assign 10 last names to an array. Write a function to display the names. Write another function to display the names in reverse order.

def printArray():

for i in range(0, len(lastNamesArray)):

print(lastNamesArray[i])

def printArrayReverse():

for i in range(len(lastNamesArray)-1, -1, -1):

print(lastNamesArray[i])

lastNamesArray = ["LastName1", "LastName2", "LastName3", "LastName4", "LastName5", "LastName6", "LastName7", "LastName8", "LastName9", "LastName10"]

printArray()

printArrayReverse()

1. Write the code for the following problem. Add another array to problem 1 above. This array should contain exam score for the respective students. That is, the first name goes with the first score etc. These are called parallel arrays. Also modify the display functions to include exam score array in addition to the last name array.

def printArray():

for i in range(0, len(lastNamesArray)):

print(lastNamesArray[i], examScoreArray[i])

def printArrayReverse():

for i in range(len(lastNamesArray)-1, -1, -1):

print(lastNamesArray[i], examScoreArray[i])

lastNamesArray = ["LastName1", "LastName2", "LastName3", "LastName4", "LastName5", "LastName6", "LastName7", "LastName8", "LastName9", "LastName10"]

examScoreArray= [90, 50, 62, 78, 89, 56, 94, 99, 100, 36]

printArray()

printArrayReverse()

1. Write the code for the following problem. Add a function to problem to display the last name and highest, last name and lowest and average exam score. Hint: for highest initialize a variable to 0 (high\_var). If the array value is higher than the high\_var then set high\_var to the array value and set high\_index to the position of the array. Proceed through the array until you get to the end. Do the same for finding the lowest using low\_var set to 999 (higher than the highest value).

For the average score, sum all the exam scores as you proceed through the loop. Use a for loop to go through each occurrence of the arrays. Note you can do all this with one for loop but if it makes more sense to you to use multiple for loops that is ok too.

def printArray():

for i in range(0, len(lastNamesArray)):

print(lastNamesArray[i], examScoreArray[i])

def printArrayReverse():

for i in range(len(lastNamesArray)-1, -1, -1):

print(lastNamesArray[i], examScoreArray[i])

def findAverage():

highVar = 0

lowVar= 999

average= 0

for i in range(0, len(examScoreArray)):

if examScoreArray[i] > highVar:

highVar = examScoreArray[i]

if examScoreArray[i] < lowVar:

lowVar = examScoreArray[i]

average = average + examScoreArray[i]

highVar = examScoreArray.index(highVar)

lowVar = examScoreArray.index(lowVar)

average = average / 10

print(lastNamesArray[highVar], examScoreArray[highVar])

print(lastNamesArray[lowVar], examScoreArray[lowVar])

print(average)

lastNamesArray = ["LastName1", "LastName2", "LastName3", "LastName4", "LastName5", "LastName6", "LastName7", "LastName8", "LastName9", "LastName10"]

examScoreArray= [90, 50, 62, 78, 89, 56, 94, 99, 100, 36]

printArray()

printArrayReverse()

findAverage()