Adhish Bahl 2347203 1MCA B Python Lab 2 Domain: Online retail store for exclusive sneakers.

Part I

Create a LIST with your domain attributes, insert the elements using the append (), insert(), extend() and add any iterables (tuples, sets, dictionaries etc.) to the list (Use all the methods).

```
myList = ["Nike", "Order Placed", "Air Jorden", "Addidas", "Blue",
"Shipped"]
print("Original List: ", myList)

myList.append("Exclusive")
print("\nList after .append(\"Exclusive\"): ", myList)

tempTouple = ("USA", "Superstar", "High Ankle")
myList.append(tempTouple) #appending a touple
print("\nList after .append(tempTouple): ", myList)

myList.insert(5, "Sale")
print("\nList after .insert(5, \"Sale\"): ", myList)

tempSet = {"Personalised", "Your Pair"}
myList.insert(2, tempSet) #inserting a set
print("\nList after .insert(tempSet): ", myList)

myList.extend("Shoes")
print("\nList after .extend(\"Shoes\"): ", myList)

tempList = ["Shoes", "Black"]
myList.extend(tempList) #extending a list
print("\nList after .extend(tempList): ", myList)

myList.extend(tempTouple) #extending a touple
print("\nList after .extend(tempTouple): ", myList)
```

```
Original List:  ['Nike', 'Order Placed', 'Air Jorden', 'Addidas',
'Blue', 'Shipped']

List after .append("Exclusive"):  ['Nike', 'Order Placed', 'Air
Jorden', 'Addidas', 'Blue', 'Shipped', 'Exclusive']

List after .append(tempTouple):  ['Nike', 'Order Placed', 'Air
Jorden', 'Addidas', 'Blue', 'Shipped', 'Exclusive', ('USA',
'Superstar', 'High Ankle')]

List after .insert(5, "Sale"):  ['Nike', 'Order Placed', 'Air Jorden',
'Addidas', 'Blue', 'Sale', 'Shipped', 'Exclusive', ('USA',
'Superstar', 'High Ankle')]
```

```
List after .insert(tempSet):  ['Nike', 'Order Placed',
{'Personalised', 'Your Pair'}, 'Air Jorden', 'Addidas', 'Blue',
'Sale', 'Shipped', 'Exclusive', ('USA', 'Superstar', 'High Ankle')]

List after .extend("Shoes"):  ['Nike', 'Order Placed',
{'Personalised', 'Your Pair'}, 'Air Jorden', 'Addidas', 'Blue',
'Sale', 'Shipped', 'Exclusive', ('USA', 'Superstar', 'High Ankle'),
'S', 'h', 'o', 'e', 's']

List after .extend(tempList):  ['Nike', 'Order Placed',
{'Personalised', 'Your Pair'}, 'Air Jorden', 'Addidas', 'Blue',
'Sale', 'Shipped', 'Exclusive', ('USA', 'Superstar', 'High Ankle'),
'S', 'h', 'o', 'e', 's', 'Shoes', 'Black']

List after .extend(tempTouple):  ['Nike', 'Order Placed',
{'Personalised', 'Your Pair'}, 'Air Jorden', 'Addidas', 'Blue',
'Sale', 'Shipped', 'Exclusive', ('USA', 'Superstar', 'High Ankle'),
'S', 'h', 'o', 'e', 's', 'Shoes', 'Black', 'USA', 'Superstar', 'High
Ankle']
```

Create a list with numeric and perform the following operations.

Write a program to swap the first and last elements in a list.

Write a program to find the sum of the digits in a list.

Write a program to find the smallest element in a list.

```
def swapFirstLast(numList):
    lastNum = numList[-1]
    numList[-1] = numList[0]
    numList[0] = lastNum
    print("\nAfter Swaping the first and last element of the list: ",
numList)

def sumOfElements(numList):
    sum = 0
    for i in range(len(numList)):
        sum += numList[i]
    print("\nSum of all the values in the List: ", round(sum, 2))

def smallestElement(numList):
    smallestElement = numList[0]
    for i in range(1, len(numList)):
        if smallestElement > numList[i]:
            smallestElement = numList[i]
    print("\n Smallest element in the list: ", smallestElement)

numList = [500, 6398.25, 6542, 21315.51, 561.15, 215]
print("Original List: ", numList)
```

```
swapFirstLast(numList) # swaping the first and last elements in the
list
sumOfElements(numList) # sum of elements in the list
smallestElement(numList)
```

```
Original List:  [500, 6398.25, 6542, 21315.51, 561.15, 215]

After Swaping the first and last element of the list:  [215, 6398.25,
6542, 21315.51, 561.15, 500]

Sum of all the values in the List:  35531.91

 Smallest element in the list:  215
```

Part II

Sort the dictionaries in ascending order based on the Key of the dictionary.

```
def sortDictAscending(myDict):
    myDict = dict(sorted(myDict.items()))
    print("\nDictionary after sorting: ", myDict)

myDict = {"Nike Air Force 1s": 123456, "Nike Air Max 95 SP": 456789,
"Puma Velophasis Overdyed": 789123, "Adidas Bonner Samba" :147852,
"New Balance Dore 860v2":258963,"CAMPERLAB Tormenta": 369741}
print("Original dictionary: ", myDict)
sortDictAscending(myDict)
```

```
Original dictionary:  {'Nike Air Force 1s': 123456, 'Nike Air Max 95
SP': 456789, 'Puma Velophasis Overdyed': 789123, 'Adidas Bonner
Samba': 147852, 'New Balance Dore 860v2': 258963, 'CAMPERLAB
Tormenta': 369741}

Dictionary after sorting:  {'Adidas Bonner Samba': 147852, 'CAMPERLAB
Tormenta': 369741, 'New Balance Dore 860v2': 258963, 'Nike Air Force
1s': 123456, 'Nike Air Max 95 SP': 456789, 'Puma Velophasis Overdyed':
789123}
```

Create the dictionary with Numeric as Value in Key – Value pair and find the sum of all the values in the Dictionary.

```
def sumOfValues(myDictionary):
    sum = 0
    valueList = list(myDictionary.values())
    for i in range(len(valueList)):
        sum = valueList[i]
    print("\nSum of all the values of the dictionary: ", sum)

myDict = {"Nike Air Force 1s": 123456, "Nike Air Max 95 SP": 456789,
"Puma Velophasis Overdyed": 789123, "Adidas Bonner Samba" :147852,
```

```
"New Balance Dore 860v2":258963,"CAMPERLAB Tormenta": 369741}
print("Original dictionary: ", myDict)
sumOfValues(myDict)

Original dictionary:  {'Nike Air Force 1s': 123456, 'Nike Air Max 95
SP': 456789, 'Puma Velophasis Overdyed': 789123, 'Adidas Bonner
Samba': 147852, 'New Balance Dore 860v2': 258963, 'CAMPERLAB
Tormenta': 369741}

Sum of all the values of the dictionary:  369741
```

Write a Python code to demonstrate the sorting in descending order of values with lambda function.

```
def sortDictDescending(myDictionary):
    myDictionary = dict(sorted(myDictionary.items(), key=lambda
x:x[1], reverse=True))
    print("\nDictionary after sorting: ", myDictionary)

myDict = {"Nike Air Force 1s": 123456, "Nike Air Max 95 SP": 456789,
"Puma Velophasis Overdyed": 789123, "Adidas Bonner Samba" :147852,
"New Balance Dore 860v2":258963,"CAMPERLAB Tormenta": 369741}
print("Original dictionary: ", myDict)
sortDictDescending(myDict)

Original dictionary:  {'Nike Air Force 1s': 123456, 'Nike Air Max 95
SP': 456789, 'Puma Velophasis Overdyed': 789123, 'Adidas Bonner
Samba': 147852, 'New Balance Dore 860v2': 258963, 'CAMPERLAB
Tormenta': 369741}

Dictionary after sorting:  {'Puma Velophasis Overdyed': 789123, 'Nike
Air Max 95 SP': 456789, 'CAMPERLAB Tormenta': 369741, 'New Balance
Dore 860v2': 258963, 'Adidas Bonner Samba': 147852, 'Nike Air Force
1s': 123456}
```