

"""1. Write a python function that returns the index of the smallest element in a list of integers. If the number of such elements is greater than 1, return the smallest index.

Use the following function header:

```
def indexOfSmallestElement(lst):"""
```

```
#import numpy as np
def indexOfSmallestElement(lst):
    # initialize K
    K = 1
    #Smallest K elements indices
    # using sorted() + lambda + list slicing
    res = sorted(range(len(lst)), key = lambda sub: lst[sub])[0:K]
    return str(res)
```

```
# initialize list
```

```
inputLst = [15, 12, 1, 784, 7, 1, 45]
#i = np.argmin(lst)
```

```
# printing original list
```

```
print("The original list is : " + str(inputLst))
```

```
# printing result
```

```
print("Index of min elements is : " + indexOfSmallestElement(inputLst))
```

"""2. Write the python function mostCommonName, that takes a list of names (such as ["Jane", "Aaron", "Cindy", "Aaron"], and returns the most common name in this list (in this case, "Aaron"). If there is more than one such name, return a set of the most common names. So mostCommonName(["Jane", "Aaron", "Jane", "Cindy", "Aaron"]) returns the set {"Aaron", "Jane"}. If the set is empty, return None. Also, treat names case sensitive, so "Jane" and "JANE" are different names."""

```
from collections import Counter
```

```
def mostCommonName(namesList):
    counter = Counter(namesList)
    print(counter.most_common()[0])
```

```
most_common = counter.most_common()
most_common_qty = most_common[0][1]
print(f'most common words, all occurred {most_common_qty} times:')
for word, qty in most_common:
    if qty == most_common_qty:
        print(word)
```

```
words = ["Jane", "Aaron", "Jane", "Cindy", "Aaron", "JANE"]
mostCommonName(words)
```

"""3. Write the python function isPalindromicList(a) that takes a list and returns True if it is the same forwards as backwards and False otherwise."""

```
# Python3 code to demonstrate working of
# Test if list is Palindrome
# Using list slicing
```

```
def isPalindromicList(lst):
```

```
# Reversing the list
reverseLst = lst[::-1]

# checking if palindrome
res = lst == reverseLst
return str(res)

# initializing list
inputList = [1, 4, 5, 4, 1]

# printing original list
print("The input list is : " + str(inputList))

# printing result
print("Is list Palindrome : " + isPalindromicList(inputList))
```