

## ASSIGNMENT 7

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):`

```
In [ ]: def indexOfSmallestElement(lst):
        if not lst:
            return None # handle empty list case
        min_index = 0
        for i in range(1, len(lst)):
            if lst[i] < lst[min_index]:
                min_index = i
            elif lst[i] == lst[min_index]:
                if i < min_index:
                    min_index = i
        return min_index
```

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.

```
In [ ]: def mostCommonName(names):
        name_counts = {}
        for name in names:
            if name in name_counts:
                name_counts[name] += 1
            else:
                name_counts[name] = 1
        max_count = max(name_counts.values())
        most_common_names = {name for name, count in name_counts.items() if count == max_count}
        if not most_common_names:
            return None
        return most_common_names
```

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

```
In [ ]: def isPalindromicList(a):
        return a == a[::-1]
```