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):

```
#defining indexOfSmallestElement function

def indexOfSmallestElement(lst):
    #initializing first element as smallest element
    smallest=lst[0]
    #initializing index as 0
    index=0
    #looping till end of lst
    for i in range(len(lst)):
        #checking if current element is smaller than smallest
        if(lst[i]<smallest):
            #setting current element as smallest
            smallest=lst[i]
            #setting current index as index
            index=i
    #printing index
    print(index)
    #returning smallest
    return smallest
#calling indexOfSmallestElement function for a sample list and printing
 result
print(indexOfSmallestElement([5,4,3,2,1]))
```

```
4
1
```

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.

```
def most_frequent (List) :
    counter = 0
    num = List[0]
    length = len(List)
    i = 0
    while i < length:
        curr_frequency = List.count (List[i])
        if (curr_frequency> counter) :
             counter = curr_frequency
             num = List[i]
        i += 1
    result = [num]
    i = 0
    while i < length:
        curr_frequency = List.count(List[i])
        if(curr_frequency == counter and List[i] not in result):
            result.append(List[i])
        i += 1
    result.sort()
    return result
List = ['Jane', 'Aaron', 'Cindy', 'Aaron']
print(most_frequent(List))
List = ['Jane', 'Aaron', 'Jane', 'Cindy', 'Aaron']
print(most_frequent(List))
List = ['Jane', 'Aaron', 'Jane', 'Cindy', 'jane', 'Aaron']
print(most_frequent(List))
```

```
['Aaron']
['Aaron', 'Jane']
['Aaron', 'Jane']
```

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.

```
def list_palindrome(a):

    if len(a) <= 1:
        return True

    if a[0] != a[-1]:
        return False


    return list_palindrome(a[1:-1])

# Sample run
print( list_palindrome([1,2,3,2,1]) )
print( list_palindrome([1,2,3,3,2,1]) )
print( list_palindrome([1,2,3,4,1]) )
print( list_palindrome([1,2,3,2,4]) )
```

```
True
True
False
False
```