# Assignment-7:

1) **Write a python function that returns the index of the smallest element in a list of integer  If the number of such elements is greater than 1, return the smallest index**

```
[ ]: def  indexOfSmallestElement(L):
       smallestIndex = 0
       smallestElement = L[0]
       for i in range (1, len(L)):
            if L[i] < smallestElement:
               smallestElement = L[i]
               smallestIndex = i

       return smallestIndex

L = list(map(int, input('Enter list of numbers: ').split()))
smallestIndex = indexOfSmallestElement(L)

print('Smallest index is:', smallestIndex)
```

```
Enter list of numbers: 1 2 3 4 5
Smallest index is: 0
```

2) **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 isPalindrome(str):
       for i in range(0,int(len(str)/2)):
         if str[i] != str [len(str)-i-1]:
           return False
       return True

     s = "madam"
     ans = isPalindrome(s)

     if (ans):
       print("It is a Palindrome")
     else:
       print("Sorry! Try again")
```

```
It is a Palindrome
```

**3) 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_common_name(name_list):

    max_frequency = 0
    common_name = name_list[0]

    for name in name_list:
        frequency = name_list.count(name)
        if frequency > max_frequency:
            max_frequency = frequency
            common_name = name

    return name
print(most_common_name(["Jane", "Aaron", "Jane", "Cindy", "Aaron"]))
```

```
Aaron
```