Challenge 2: Find Maximum in a List

In this challenge, find the maximum number in a List.

Problem Statement 1

Create a `findMaximum` function that receives a `list` as a parameter and returns the maximum value in the list. As you iterate over the list, you may want to keep track of the current maximum value in order to keep comparing it with the next elements of the list.
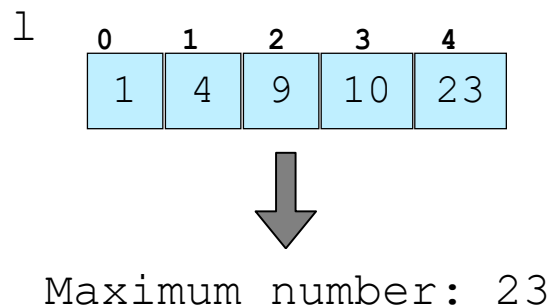
Input

A list

Output

Maximum number in the list

Sample Input

[1, 4, 9, 10, 23]

Sample Output

max = 23


```
 l     0   1   2   3   4
      ┌───┬───┬───┬───┬───┐
      │ 1 │ 4 │ 9 │10 │23 │
      └───┴───┴───┴───┴───┘
              │
              ▼
    Maximum number: 23
```

Coding Exercise

Write your code below. It is recommended that you try solving the exercise yourself before viewing the solution.

For this section, you may want to consult the Python documentation on Loops.

```python
def findMaximum(list):
    # write your code here
    pass
```

Problem Statement 2

Modify the previous `findMaximumValueIndex(list)` function such that it returns a list with the first element being the index of the maximum value in the list and the second being the maximum value. Besides keeping the maximum value found so far, you also need to keep the position where it occurred.

Input

A list

Output

Maximum number and index of the number in the list

Sample Input

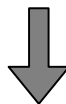[1, 4, 23, 10, 9]

Sample Output

max = 23

index = 2

Coding Exercise

Write your code below. It is recommended that you try solving the exercise yourself before viewing the solution.

For this section, you may want to consult the Python documentation on Loops.

```
l    0   1   2   3   4
     1   4  23  10   9

          ↓

   Maximum number: 23
   index: 2
```

```python
def findMaximumValueIndex(list):
    # write your code here
  pass
  # return [index,maximum] #return your index and maximum in the form of a list
```

Now, let's move on to the detailed solution review of the above two problems.