Solution Review: Averaging Values in a List

This lesson gives a detailed solution review of how to average values in a list.

WE'LL COVER THE FOLLOWING

Solution: Use the Python `len` and `sum` Functions

The solution is fairly straightforward due to Python's inbuilt functions.

- Normally, you'd have to iterate over the entire list to sum each element, but Python already has the `sum` function to do that for you.
- Similarly, with a single instruction, the `len` function can determine the size of the list. What's left then is just to use the basic formula for calculating the average, and divide the sum with the length of the array to obtain the required average.

For example:

Given a list

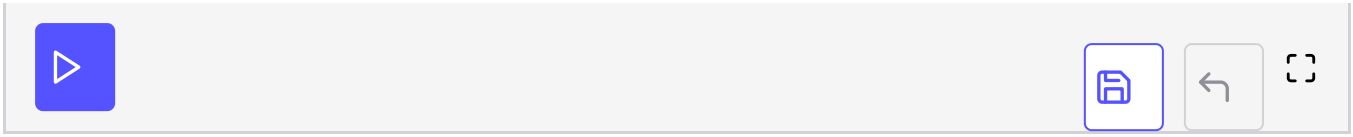
```
l = [1,4,9,10,23]
list_sum = sum(l)
list_length = len(l)
average = list_sum/length
```

The demonstration is given in python code below:

```
def getAverage():
  l1 = [1, 4, 9, 10, 23]
  avg = sum(l1)/len(l1)
  return avg

avg = getAverage()
```

```
print(avg)
```



Now, let’s move on to another challenge of lists.