

PYTHON: ASSIGNMENT 02

Problem Statement 01

Given a list of lists

```
numbers_nested = [[1,-1,2],[0,-5,3,5,-2],[1,2,1,0,-2,-3]]
```

Write a program to grab only positive numbers in each nested list and put that in a new list

Expected Output

```
[1, 2, 3, 5, 1, 2, 1]
```

Code:

```
numbers_nested = [[1, -1, 2], [0, -5, 3, 5, -2], [1, 2, 1, 0, -2, -3]]
positive_numbers = []
for nested_list in numbers_nested:
    for num in nested_list:
        if num > 0:
            positive_numbers.append(num)
print(positive_numbers)
```

Output:

```
✓ 0s numbers_nested = [[1, -1, 2], [0, -5, 3, 5, -2], [1, 2, 1, 0, -2, -3]]
positive_numbers = []
for nested_list in numbers_nested:
    for num in nested_list:
        if num > 0:
            positive_numbers.append(num)
print(positive_numbers)
```

[1, 2, 3, 5, 1, 2, 1]

Problem Statement 02

Given a list of lists

`L = [[1,2,3], [4,5,6,3], [-1,-2,-10,5,8]]`

Write a program to to print the average sum of value from each inner list and print the sum of each average

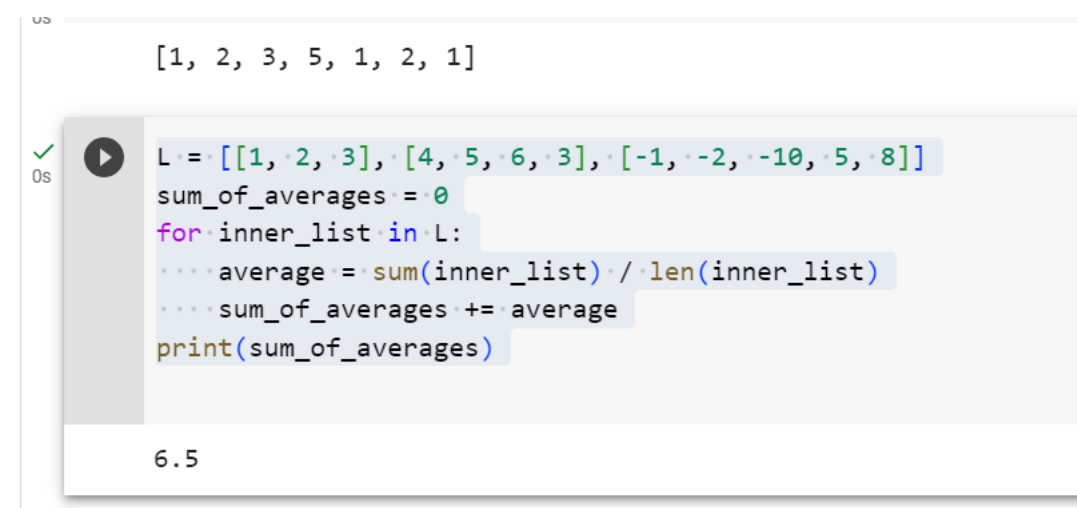
Expected Output

$6/3 + 18/4 + 0 \Rightarrow 2 + 4.5 \Rightarrow 6.5$

Code:

```
L = [[1, 2, 3], [4, 5, 6, 3], [-1, -2, -10, 5, 8]]
sum_of_averages = 0
for inner_list in L:
    average = sum(inner_list) / len(inner_list)
    sum_of_averages += average
print(sum_of_averages)
```

Output:



```
[1, 2, 3, 5, 1, 2, 1]
```

```
✓ 0s [1, 2, 3], [4, 5, 6, 3], [-1, -2, -10, 5, 8]]
sum_of_averages = 0
for inner_list in L:
    average = sum(inner_list) / len(inner_list)
    sum_of_averages += average
print(sum_of_averages)
```

6.5