

# Python

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## Question 1

Write a Python function that adds up all the values in 2D-array. Example:

```
matrix = [[1,2,3],  
          [4,5,6],  
          [7,8,9]]
```

Should give 45. Because  $1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 = 45$

## Question 2

Write a Python function that gives the following output:

```
myList heeft lengte 5
element met index 0 : 3
element met index 1 : 12
element met index 2 : pizza
element met index 3 : 3
element met index 4 : 4
```

## Question 3

Write a Python function that receives an array and for each integer element in that array it creates a sub-array with three times that element. For each String element in that array it creates a sub-array with 2 times that element. Example:

```
array = [12, 43, "Y", 44, "X"]
```

Should `return`:

```
[[12, 12, 12], [43, 43, 43], ["Y", "Y"], [44, 44, 44], ["X", "X"]]
```

## Question 4

Write a Python function that adds up the columns of the matrix and put the result into a new array. Example:

```
array = [[1, 3, 1, 1, 4],
          [2, 4, 3, 1, 2],
          [3, 5, 4, 1, 1],
          [4, 6, 2, 1, 4]]
```

Should `return`:

```
[10, 18, 4, 11]
```