

## Discussion 5: Mutability

What are the values of the script variables x and y after the given script finishes running?

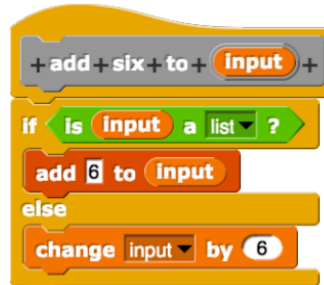
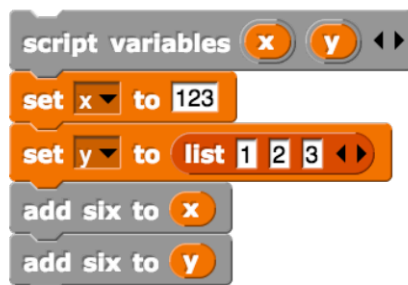
a.



x: 6

y: [1,2,3]

b.

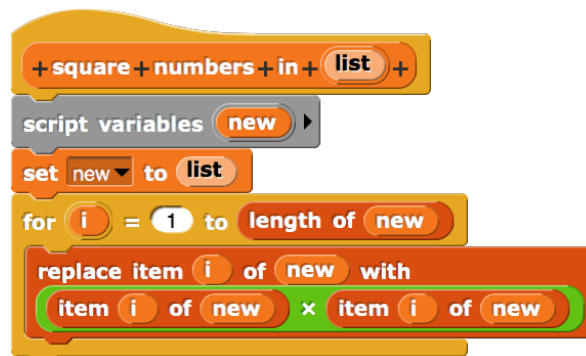


x: 129

y: [1,2,3,6]

### Challenge: Errors Galore

The following questions are based off this block:



- a. When running this block, we get the following error: What caused this error, and how can we fix it?

square numbers in list 1 2

Inside: Error reporter didn't report

The error is due to not reporting at the end of the block definition. We can append [ report (new) ]

after the for loop and the block will work.

b. Now, that we've fixed it, we try to test our code, but we get another error:



How can we fix this?

The input list ( list [1] [2] ) must be nested in a list.

c. Now, we try running the following test, but it doesn't work as expected:



Why does it report this, and how can we fix it?

The first time we call (square numbers in []) on (my list) we are mutating (my list) so it becomes (list [1] [4]).

When we call (square numbers in []) on (my list) again we then get ( list [1] [16] ) which is not equal to the expected output (list [1] [4] ). To fix this inside the (square numbers in []) block we can set (new) to (copy of (list)).