# Array of products

'''Algorithm

1. initialize a list comprehension called products

2. begin a for loop cycling thrugh the range of the length of the array.

initialize running product == 1

3. begin a nested for that will be: for every i item in the array take the j value of

all the remaining items in the array (where i is not equal to j) take the running product and

multiply it by all other values of array[j] and update the running product.

4. returning to the outer loop we assign products[i] to the runningProduct and tehn

5. return products

Input(array)

'''

def arrayOfProducts(array):

products = [1 for \_ in range(len(array))]

for i in range(len(array)):

runningProduct = 1

for j in range(len(array)):

if i != j:

runningProduct \*= array[j]

products[i] = runningProduct

return products