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HW 2

Psuedocode of finding max of subarrays:

Make a variable, maxSum, as first index of the array

Iterate over the array from the beginning to the end

At each iteration set a new variable, sum to 0

and iterate over the array starting from the index the first iteration is at, to the end

at each index of the array, add it to the sum

if the sum is greater than the maxSum then set maxSum to be sum

I used python for the actual implementation:

```python
def maxSubArray(array): # O(n^2)
    maxSum = array[0]
    # for loops going from 0 to end of array
    # and another one
    # double nested for loops so O(n^2)
    # this essentially gets all the possible subarrays
    # and checks each time if it is greater than the overall maxSum
    for i in range(len(array)):
        currentSum = 0
        # resets the currentSum
        for j in range(i, len(array)):
            currentSum += array[j]
            # each case, it checks if the currentSUm is greater than the maxSum
            # if so, then updates maxSum
            if currentSum > maxSum:
                maxSum = currentSum
    return maxSum
```