

HW 2

Pseudocode of finding max of subarrays

Just initializing maxSum as first index.

maxSum = array[0]

For i in 0 .. len(array)

 Sum = 0

 For j in i... len(array)

 sum += array[j]

 if(sum > maxSum)

 maxSum = sum

return maxSum

I used python for the actual implementation:

```
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
```