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# Project 1

## Theoretical Run-time Analysis:

Algorithm 1: Enumeration (max\_subarray\_enum)

array\_sum, array\_start, array\_end = 0

**for** i = 0 to array.length

high\_sum = 0

start = i

end = null

**for** j = 0 to array.length

current\_sum = sum(array[i], array[j+1])

**if** current\_sum > high\_sum

high\_sum = current\_sum

end = j

**if** high\_sum > array\_sum

array\_sum = high\_sum

array\_start = start

array\_end = end

**return**(array\_sum, array\_start, array\_end)

## Proof of Correctness:

## Testing:

## Experimental Analysis: