

Linear time algorithm for maximum subarray.

```
n = A.length
max_sum = -∞
cur_sum = -∞ // max sum ending at A[j]
for j = 1 to n // j = index of current upper index of max sum being computed
    if cur_sum > 0 // max ending at A[j] includes current + A[j]
        cur_sum = cur_sum + A[j]
    else // else max ending at A[j] is just A[j]
        cur_sum = A[j]
        cur_sum_low_index = j // reset lower index since sum is just A[j]
    if cur_sum > max_sum // update best so far
        max_sum = cur_sum
        low = cur_sum_low_index
        high = j
return(low,high,max_sum)
```