Algorithm Stock Span

Ensure: One Based Indexing

1: **function** $Calculate\_Stock\_Span(prices, len)$
    ▷ $span[i]$ denotes the span of the price of stock at the $i - th$ day

2:     **for** $i = 1 : len$ **do**

3:         **while** $stack$ **is not empty, do**
4:            **if** $price[stack.top] <= price[i]$ **then**
5:                $stack.pop$
6:            **else**
7:                **Break** Loop

8:         **if** $stack$ **is not empty, then**
9:            $span[i] \leftarrow (i - stack.top)$
10:        **else**
11:           $span[i] \leftarrow (i + 1)$
12:        $stack.push(i)$
13:     **end for**

14:     **return** $span$