Algorithm Stock Span

Ensure: One Based Indexing

```
1: function Calculate_Stock_Span(price)
   \triangleright span[i] denotes the span of the price of stock at the i-th day
        len \leftarrow price.length
2:
        for i = 1 to len do
 3:
           while stack is not empty, and price[stack.top] \leq price[i] do
 4:
               stack.pop
 5:
           end while
6:
           if stack is not empty, then
 7:
               span[i] \leftarrow (i - stack.top)
8:
9:
           else
               span[i] \leftarrow i
                                                                                   ▷ One Based Indexing
10:
           stack.push(i)
11:
        end for
12:
13:
        {\bf return}\ span
```