

⑯ Find next greater element for each element in array.

- check current element with next, if next is not greater then push current idx into stack, else set result idx value as next and compare values with idx values in stack.

```
int [] nextGreaterElement (int [] a) {  
    Stack<Integer> s = new Stack<>();  
    Integer [] result = new Integer [a.length];  
    int current prev = 0;  
    for (int next = 1; next < a.length; next++) {  
        if (a[next] > a[current]) {  
            result[current] = a[next];  
            while (!s.isEmpty()) {  
                if (a[s.peek()] < a[next]) {  
                    result[s.peek()] = a[next];  
                    s.pop();  
                } else {break;}  
            }  
        } else { s.push(i); }  
        i = next;  
    }  
    while (!s.isEmpty()) { result[s.peek()] = null; s.pop(); }  
    return result;  
}
```