

## Boolean Confusion

Give the best and worst case runtime in  $\Theta()$  notation as a function of  $N$ , where  $N$  is `arr.length`. Your answer should be simple with no unnecessary leading constants or summations.

```
1 void confusion(boolean[] arr) {  
2     boolean first = arr[0];  
3     int next;  
4     for (next = 1; arr[next] == first; next++) {  
5         if (next == arr.length - 1) {  
6             return;  
7         }  
8     }  
9     for (int i = 0; i < next; i++) {  
10        arr[i] = !arr[i];  
11    }  
12    confusion(arr);  
13 }
```

Best Case:  $\Theta(\quad)$ , Worst Case:  $\Theta(\quad)$