

Woosuk Lee
APCS2 pd8
HW02 -- Speaking In Pseudocode
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Algorithm for the dream of every CS students: runtime $O(n)!!$
(help credits from the other WL, Wenting Li, from period 1)
Pseudocode

Array is the variable containing $n*n$ matrix

```
Int k = array[0][n]; //start from the top right corner
While (k != target){
    If k < target
        Set k to the value to its west
    Else
        Set k to the value to its south
}
```

The worst case scenario for this algorithm is just going to be $2n-2$, which is simply $O(n)$.
It is possible to just make these modifications to the variable k because it is ensured that the rows and columns are necessarily in ascending order from left to right.