

CS16 - Pseudocode Reference

Spring 2009

- **Determine the title**
make sure that you Title your algorithm appropriately
- **Specify the input and output (parameters and return)**
and be sure to include any restriction on the inputs
- **Be mindful of how loops are done in pseudocode**
they are different than in java
- **Be careful with your tabbing**
since there are no braces to indicate blocks of code
- **Use methods found in adt instead of describing what the do**
instead of saying " check if queue is empty" write queue.isEmpty()
- **Use symbols appropriately**
for example \leftarrow instead of = for assignment
- **Make sure to pass in or instantiate all variables**
do not use S.isEmpty() without instantiating S or having S be a parameter
- **Comments go in braces**
- **Method calls are identical to java**
for example ta.holdHours(2)
- **Refer to slides if you don't know the format of the code you want.**

Java Version

```
public int arrayMax(int[] intArray, int n) {
    int currentMax = intArray[0];
    for(int i = 1 ; i < n ; i++) {
        if (currentMax < intArray[i]) {
            currentMax = intArray[i];
        }
    }
    return currentMax;
}
```

PseudoCode Version

Algorithm arrayMax(A,n):

Input: An array A storing $n \geq 1$ integers

Output: The maximum element in A.

```
currentMax  $\leftarrow$  A[0]
for i  $\leftarrow$  1 to n - 1 do
    if currentMax < A[i] then
        currentMax  $\leftarrow$  A[i]
return currentMax
```