RAM:

* Assignments
* Retrieve values
* Computations
* Return

Maximum value in array of integers

INPUT: A - array of size n



OUTPUT: integer

arrayMax(A) {



currentMax <- A[0] **2**



For(I <- 1 to u) 1 + 2(n – 1)



If(A[i] > currentMax)



currentMax <-A[i]



return currentMax;



}

INPUT: A – array, n – integer

OUTPUT: integer

recursiveMax(A, n) {

if (n == 1) **1**

return A[0] **2**

return max(recrusiveMax(A, n – 1), A[n – 1]) **6**

**T(n) = {3, T(n – 1) + 7}**

**3 + 7(n – 1) =>**

**7n - 4**

Big-o: Complexity

* Log(n), log2(n), √n, n, nlog(n), n2, n3, 2n
* Much simpler