Algorithm Question Solution, ver. 1.0

7/4/16

Which best characterizes the running time of the following code segment?

for (int j = 1; j <= n; j++) {

for (int k = 1; k <= n; k = k \* 2)

System.out.println(j + " " + k);

}

(A) O(log n)

(B) O(n log n)//correct. Note second loop is k\*2

(C) O(n) //Only if first loop

(D) O(n\*n) //If second look incremented by one

(E) O(n!)