

CMPE 242
Spring 2021
Hands-On Activity 6

- Find the running time of the following algorithms.
- Give your answers in *Big-O* and \sim notations.

1.	<pre> for i := 1 to n do for j := 1 to n do if A[i] == B[j] then return TRUE return FALSE </pre>	Answer: _____
2.	<pre> for i := 1 to n do for j := i + 1 to n do if A[i] == A[j] then return TRUE return FALSE </pre>	Answer: _____
3.	<pre> void f (int n) { if (n == 1) System.out.println("Tick"); if (n > 1) { f(n/2); f(n/2); for (int i = 0; i < n; i++) System.out.println("Tick"); } } </pre>	Answer: _____
4.	<pre> int recursiveFun5(int n) { for (i = 0; i < n; i += 2) { // do something System.out.println("Tick"); } if (n <= 0) return 1; else return 1 + recursiveFun5(n-5); } </pre>	Answer: _____