## Bubblesort running time

## We have

►  $t(1) = C_1$ ►  $t(n) = C_2 n + t(n-1)$ Let  $C = \max\{C_1, C_2\}.$ 

In an earlier class, we proved (using induction) that that  $\forall n \in \mathbb{Z}^+, t(n) \leq Cn^2$ .