

Homework Assignment: 2

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1. X Sorting Algorithm

(a)

*EXAMPLE*  $\Rightarrow$  *AXEMPLE*  $\Rightarrow$  *AEXMPLE*  $\Rightarrow$  *AEEMPLX*  $\Rightarrow$  *AEELPMX*  $\Rightarrow$  *AEELMP*

(b)

(c)

2. Bubble Sort

(a)

(b)

(c)

3. Show that  $n^2 \in O(n^2 + 10n), n \geq 0$

4. Show that  $n \notin \Omega(n^2)$