Exercise

- Example: Running time estimates - empirical analysis
  - Personal computer executes 10^9 compares/second
  - Super-computer executes 10^{13} compares/second

	Selection sort (N^2)			Merge sort (N log$_2$ N)		
N	Million	10 million	Billion	Million	10 million	Billion
PC	16.7 min			instant	0.2 sec	
Super Com	0.1 sec			Instant	Instant	Instant

$log_{10}2 \cong 0.3$
86,400sec/day
instant < 0.1 sec

Use a reasonable or understandable time units.
Do not say, for example, "3660 days" nor "1220 seconds",
but 10.0 years or 20.3 min, respectively.

※ **Bottom line**: Good algorithms are better than supercomputers.