CS240

Nathan Sprague

November 2, 2012

- Fill in the following table with the appropriate BEST-CASE big-O values.

	# comparisons	# assignments
Selection		
Insertion		
Quick		
Merge		

- Fill in the following table with the appropriate WORST-CASE big-O values.

	# comparisons	# assignments
Selection		
Insertion		
Quick		
Merge		

- Fill in the following table with the appropriate AVERAGE-CASE big-O values.

	# comparisons	# assignments
Selection		
Insertion		
Quick		
Merge		

Sorting Quiz 1/3 - Solutions

- Fill in the following table with the appropriate BEST-CASE big-O values.

	# comparisons	# assignments
Selection	$O(n^2)$	$O(n)$
Insertion	$O(n)$	$O(n)$
Quick	$O(n \log n)$	$O(n \log n)$
Merge	$O(n \log n)$	$O(n \log n)$

Sorting Quiz 2/3 - Solutions

- Fill in the following table with the appropriate WORST-CASE big-O values.
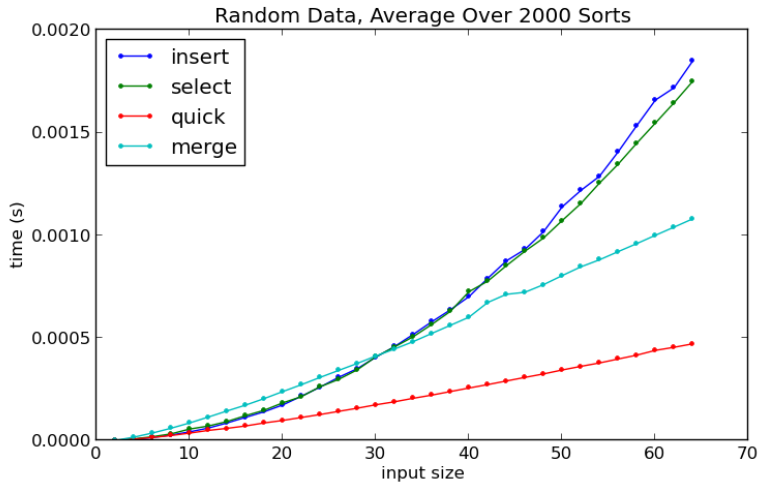
	# comparisons	# assignments
Selection	$O(n^2)$	$O(n)$
Insertion	$O(n^2)$	$O(n^2)$
Quick	$O(n^2)$	$O(1)$
Merge	$O(n \log n)$	$O(n \log n)$

Sorting Quiz 3/3 - Solutions

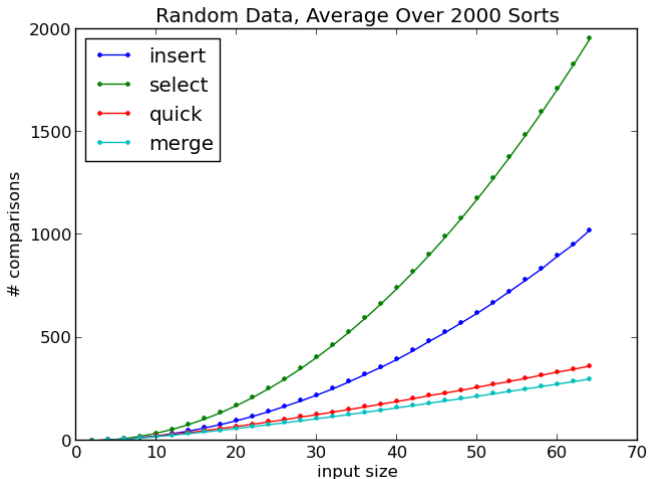- Fill in the following table with the appropriate AVERAGE-CASE big-O values.

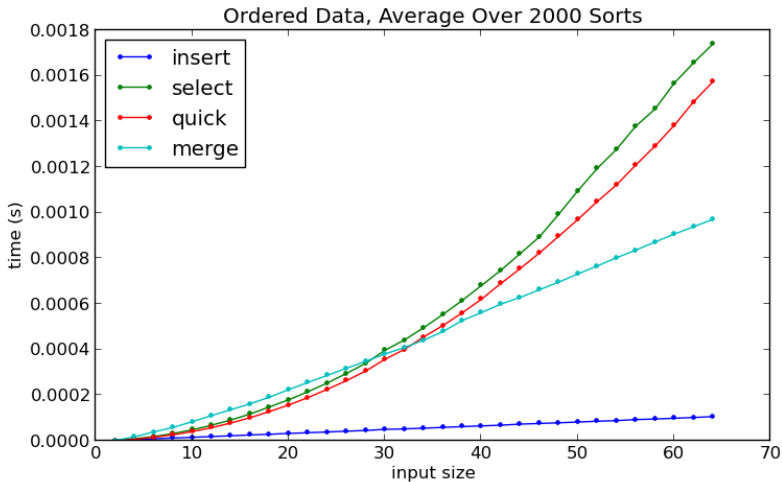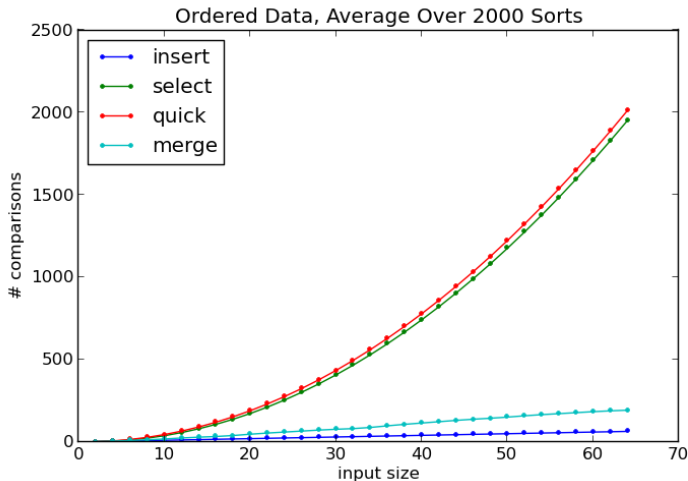|	# comparisons	# assignments
Selection	$O(n^2)$	$O(n)$
Insertion	$O(n^2)$	$O(n^2)$
Quick	$O(n \log n)$	$O(n \log n)$
Merge	$O(n \log n)$	$O(n \log n)$

Random Data, Average Over 2000 Sorts

Sorting Random Inputs - Comparisons

Sorting Random Inputs - Assignments
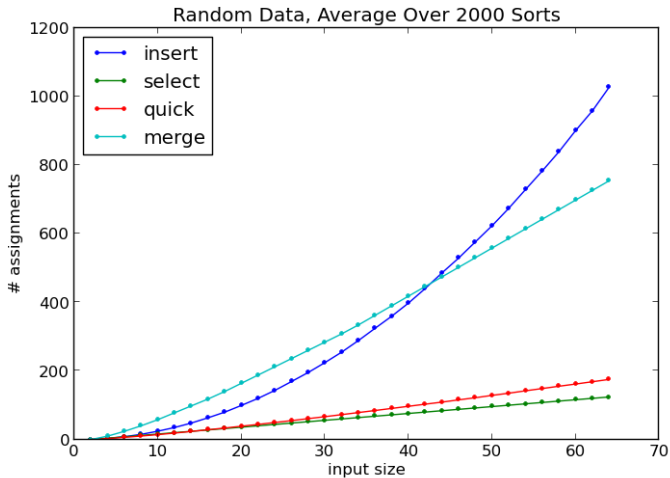
Sorting Ordered Inputs - Time

Sorting Ordered Inputs - Comparisons

Ordered Data, Average Over 2000 Sorts

Sorting Ordered Inputs - Assignments