| COS 226 Fall 2013 Class Exercise 7 | 4 questions; 4 pgs. | 2013-09-26 |
| :--- | :--- | :--- |
| © 2013 Sudarshan s. Chawathe |  |  |

Today's topics: Merge-sort and quick-sort. $\S \S$ 8.5, 8.6.
Next class: Binary heaps. §§19.*.

1. List the members of your group below. Underline your name.
2. Depict the action of 2-way merge-sort on the following array. Clearly indicate all recursive mergesort and merge invocations, and the arguments and return values of all invocations.
$\begin{array}{llllllllllllll}37 & 90 & 35 & 88 & 49 & 55 & 13 & 50 & 26 & 73 & 31 & 51 & 99 & 46 \\ 90 & 13 & 27 & 84\end{array}$
3. Repeat Question 2 using a 3 -way merge-sort.
4. Repeat Question 2 using quick-sort, using the median-of-three strategy for pivotselection.
[additional space for answering the earlier question]
