

1 ASSIGNMENT I

1. Due Date: March 14, 2011 11:55pm
2. In this assignment, you're to sort a multi-column unsorted integer file.
 - Go to <http://siber.cankaya.edu.tr/ozdogan/OperatingSystems/spring2011/assign1/a1gen.php> and input your student ID to download file.
 - The first line of the file contains number of columns and number of integers.
 - According to that information, write a complete C program to sort all the integers in a single-column format to standard output or directly to a file.
 - Which sorting algorithm?

Table 1: You should use the following sorting algorithms depending on the last digit of your Student ID.

Last digit	Algorithms	Complexity
0-1	Quick sort	$O(n \log n)$
2-3	Merge sort	$O(n \log n)$
4-5	Heap sort	$O(n \log n)$
6-7	Bubble sort	$O(n^2)$
8-9	Insertion sort	$O(n^2)$

- The last column is just given for information, not relevant for your assignment.