WIA2005 Algorithm Design & Analysis
Semester 2, 2016/17
Tutorial 2

PART 1 – Illustrate the sorting algorithm

Given the following array:

A = ⟨154, 56, 77, 134, 186, 56, 95, 24, 13, 83, 95, 143⟩

Illustrate how array A is sorted in an ascending order using the following algorithm:

1. Bubble sort
2. Counting sort
3. Radix sort
4. Bucket sort
5. Shell sort

PART 2 – Time complexity

Each of the algorithms in Part 1 is good for some condition, and bad for others. Find the time complexity for each of the algorithm and discuss what is the best application condition of the algorithm.