## **Homework 6: Sorting**

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The code is attached to this homework submission.

This code implements the bitonic sorting. The code has following features:

- Only work for the case of the array size  $n = 2^k$ , where k is a positive integer.
- The number of processes used for running is p = n, i.e. each process holds 1 element of the array.
- For input: each process generates a random number  $x_i$  (i = 0, 1, ...n-1).
- Output array is a sorted array in the way that rank 0 holds the smallest element, rank 1 holds the next bigger element and up to rank n-1 holds the biggest element.