Implementation of data structures and algorithms
Short Project 10: RMQ

Version 1.0: Initial description (April 25).
Due: 11:59 PM, May 10th, 2020.

Submission procedure: same as usual.

Team task:
Part b is optional. Successful implementation can earn you an excellence credit.

a. Implement hybrid approach one for the RMQ problem. Measure the preprocessing and query time for several arrays of size 128M, 256M, and 512M. Measure the query time for various ranges and take the average value. Also, study the effect of range size on the query time.
b. Implement Fischer-Heun algorithm. Compare its performance with hybrid approach one for various array sizes and query ranges. In their paper, Fischer and Heun observed that an <O(n), O(log n)> was slightly faster than their algorithm. (Read Section 5 of their paper to understand more about their experimental study. Soft copy of their paper is in the shared box folder.) They conducted experiments for array sizes up to 10M. Run experiments and investigate whether it holds true for larger array sizes (128M, 256, 512M). **(1 EC)**