

Advanced Programming Assignment-3 (RUBRIC)			
	zero marks to be given directly if the pom.xml is not present		
Part	Criteria	Description	Marks
Part A (8)	Algorithm Correctness	The algorithm for Odd Even sort (non parallel version) should be correctly implemented and for parallelization, students should have mentioned where and how they have used parallelization (give 0 marks if the non-parallel version is incorrect)	1+1
	Test Cases	Both parallel and non-parallel codes should have been run for 5 values of N : 1, 10, 100, 1000, 10000 and the respective times for each of them should be reported (binary marking for each value of N for each mode (parallel / non-parallel) )	5 (0.5*10)
	Effect of Parallelization	Students should have justified the impact of parallelization - in case time does not improve, they should have written what all experiments they did (like changing number of threads) and reasons for not getting improvements in execution time. Give marks if the reason is justified.	0.5
	Usage of keyword	Have extended Thread class, and used synchronized keyword to avoid race conditions. Have overridden the run method in thread class	0.25+0.25
Part B (12)	Correct Implementation	Functions for insertion, and searching should be correctly implemented for both non-parallel and parallel versions. Check that the tree is always balanced and is a binary tree. Deduct 2 marks if it is not balanced or an AVL tree or a BST	6 (3+3)
	Test Cases	A total of 9 experiments should have been conducted as written in the question (3 for non-parallel for different values of N and 6 for parallel for different values of N and T)	4.5(0.5*9)
	Effect of Parallelization	Students should have justified the impact of parallelization - in case time does not improve, they should have written what all experiments they did (like changing number of threads) and reasons for not getting improvements in execution time	0.5
	Usage of Keyword	Have extended Thread class, and used synchronized keyword to avoid race conditions. Have overridden the run method in thread class	0.5+0.5
			20