Note: 2 out of 4 lab assignments will be graded and counted towards 20% of the course. Python is the ONLY accepted programming language for this course.

WARNING: disciplinary actions (zero mark for the lab, or immediate failure of the course, or academic warning from the university) will be taken for any plagiarism.

Due time: Friday, 20th April, 23:59PM through NTULearn -> MH1402 -> Labs -> LAB4 Submission. You may submit multiple times, only the last version counts. Indicate your Matric Number in all your submission files.

Task: Implement MergeSort and QuickSort

1. MergeSort(mylist) should be a recursive function, which takes 'mylist' as input, and update the sorted list back to 'mylist'. It splits the problem into two halvies, and the left half takes one less element when the size of 'mylist' is odd. Note 'mylist' might contain repeated values.

2. QuickSort(mylist) should be a recursive function, which takes 'mylist' as input, and update the sorted list back to 'mylist'. It always uses the last element of the current 'mylist' as the pivot. Note 'mylist' might contain repeated values.

The test codes and test vectors are provided in the framework, do ensure your program output **EXACTLY** the same before submission.