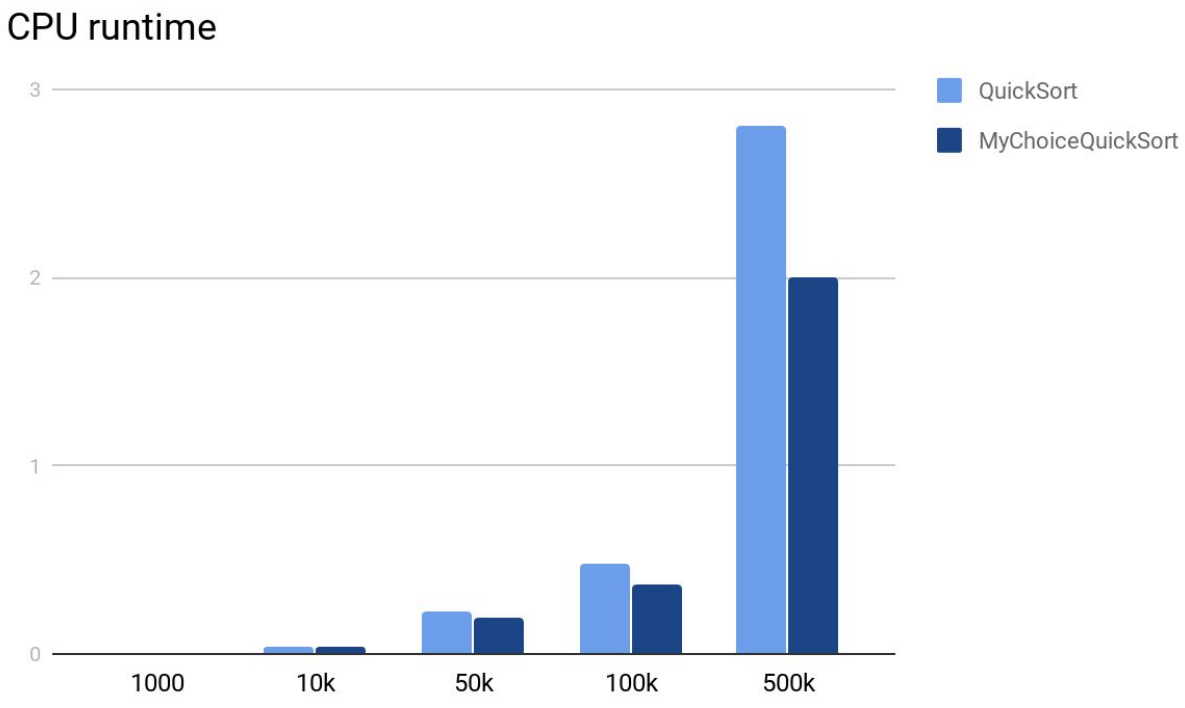
Results

Following are the results after execution of quicksort and my choice quicksort for data sets of sizes [1000,10k, 50k, 100k, 500k]
The x-axis represents the dataset sizes and the y-axis represents the CPU time taken for execution.

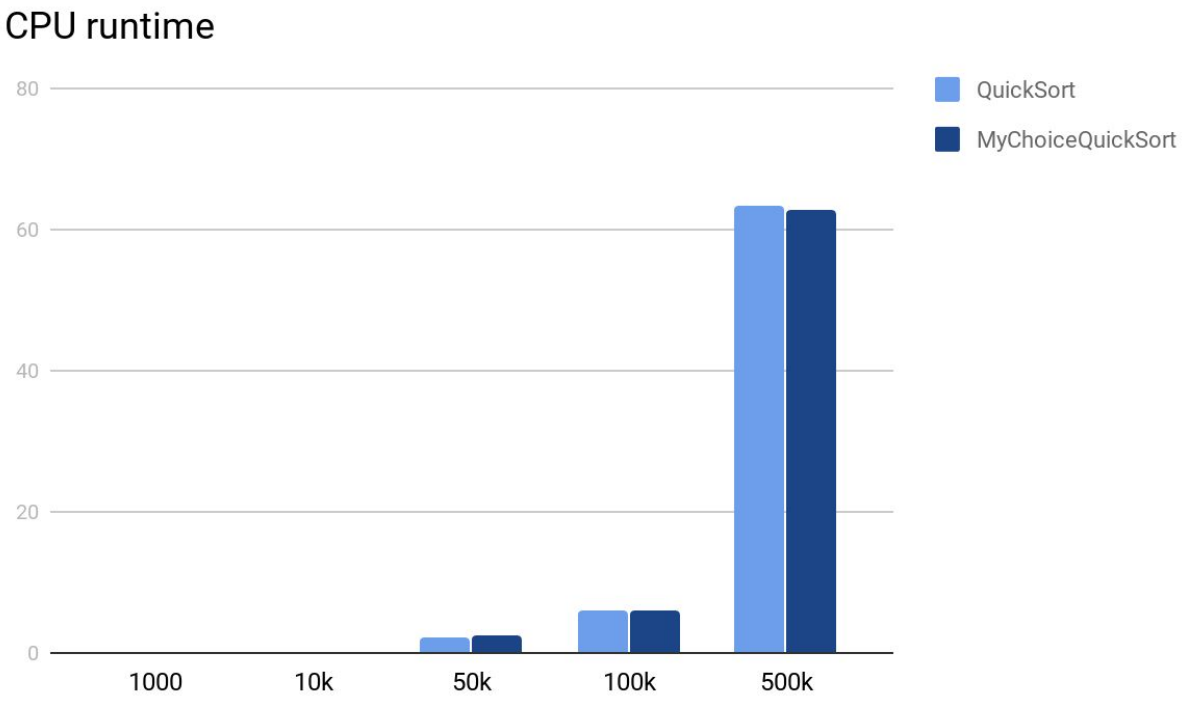
Random datasets:

Dataset	Quicksort	My choice quicksort
1000	0.00498611927	0.003948688507
10k	0.04028975964	0.03885183334
50k	0.2257713079	0.1921661854
100k	0.4790888071	0.3729171515
500k	2.882212806	2.042463613



Poisson distribution of data values:

Dataset	Quicksort	My choice quicksort
1000	0.01374220848	0.01157653332
10k	0.2432452202	0.23897717
50k	2.260518241	2.352934575
100k	5.958769202	6.081556678
500k	63.40109909	62.65006151



Instructions:

To run the code: python main.py