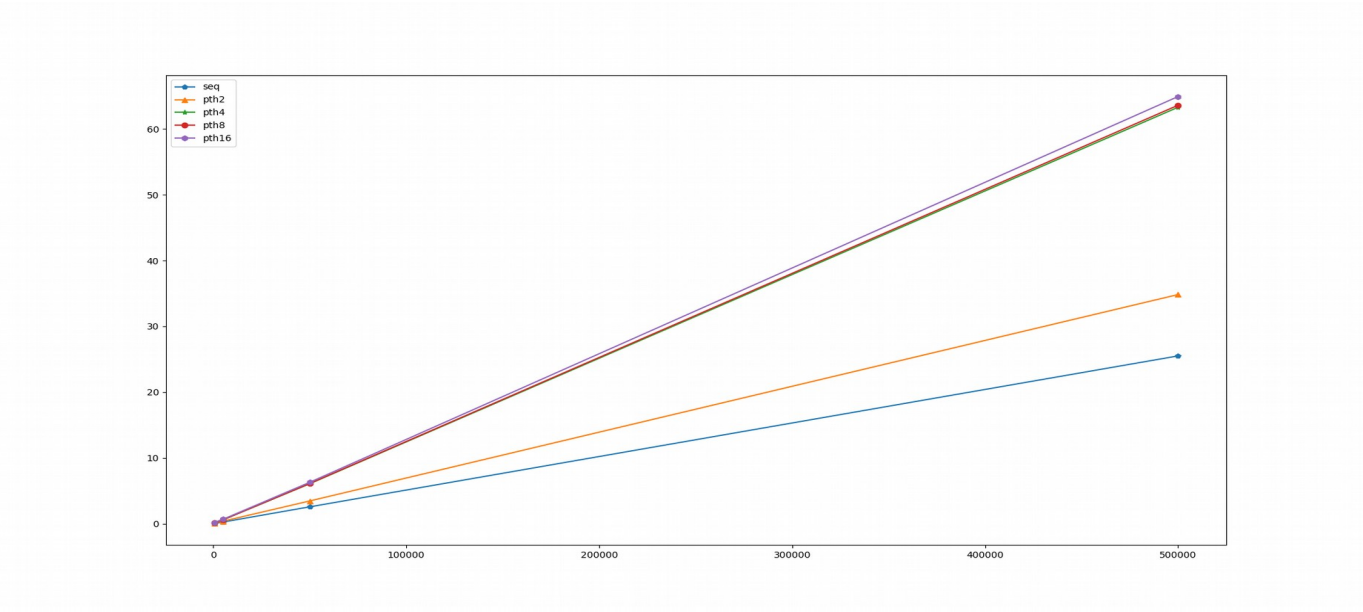
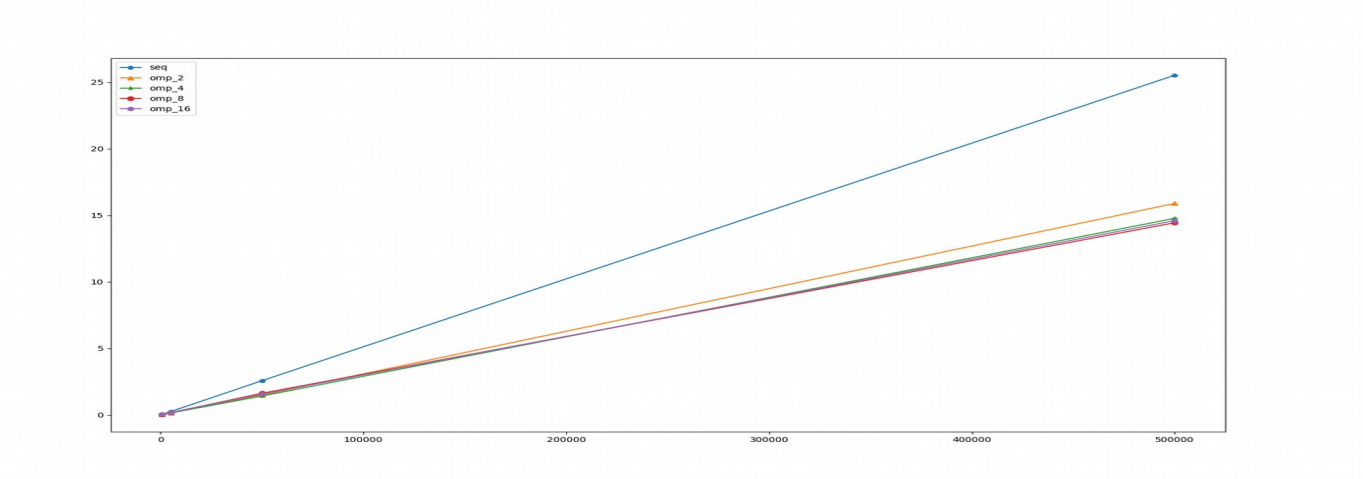
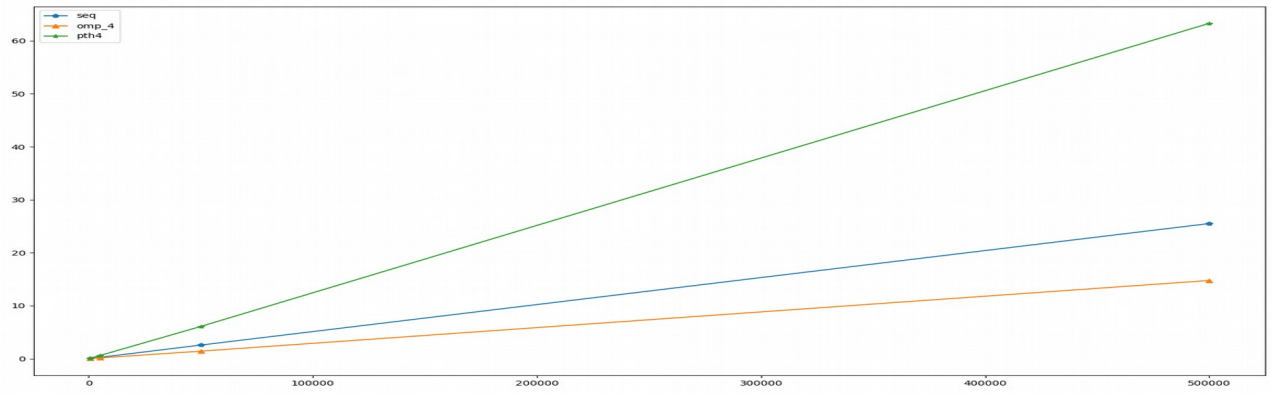
REPORT
ANSH PRAKASH
2016CS10367
SEQ VS P_THREAD
Y-Axis=Time(s)
X-axis=Data_size



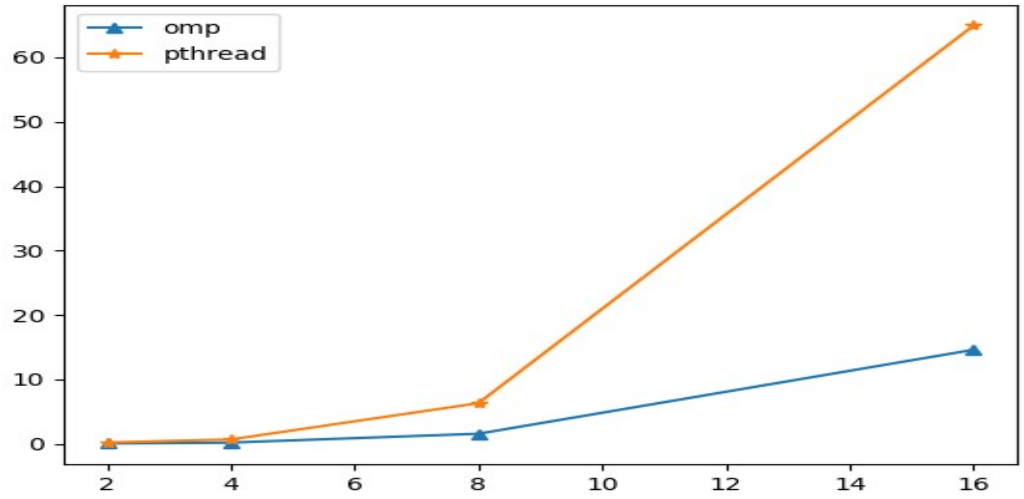
SEQ VS OMP
Y-Axis=Time(s)



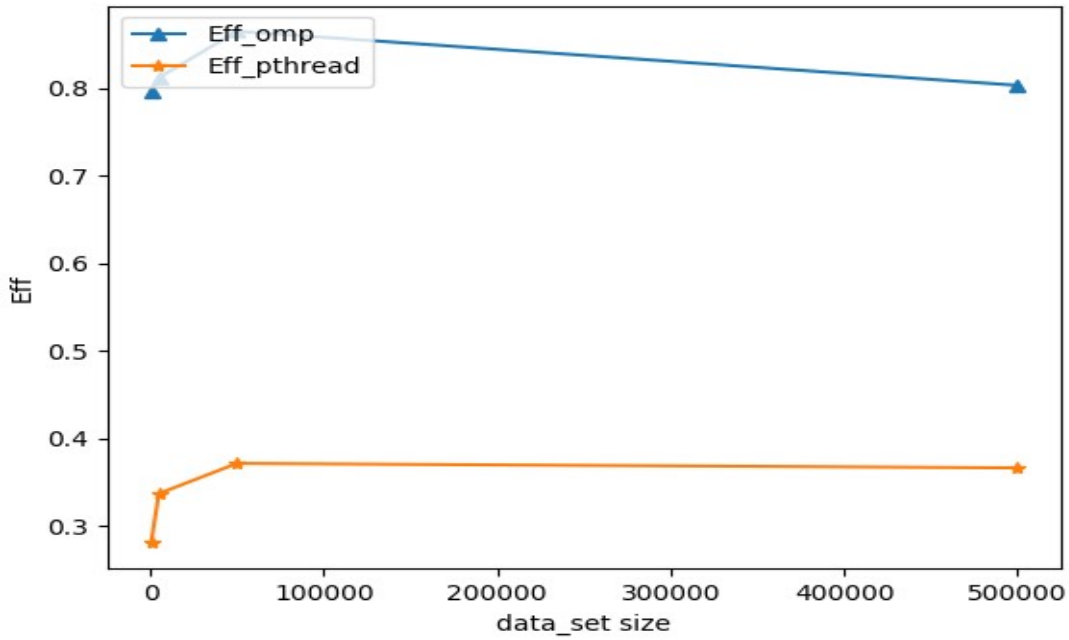
4-THREAD
Y-Axis=Time(s)



FIXED PROBLEM SIZE
VARYING NUMBER OF PROCESSORS
DATA_SET_SIZE :50000 points

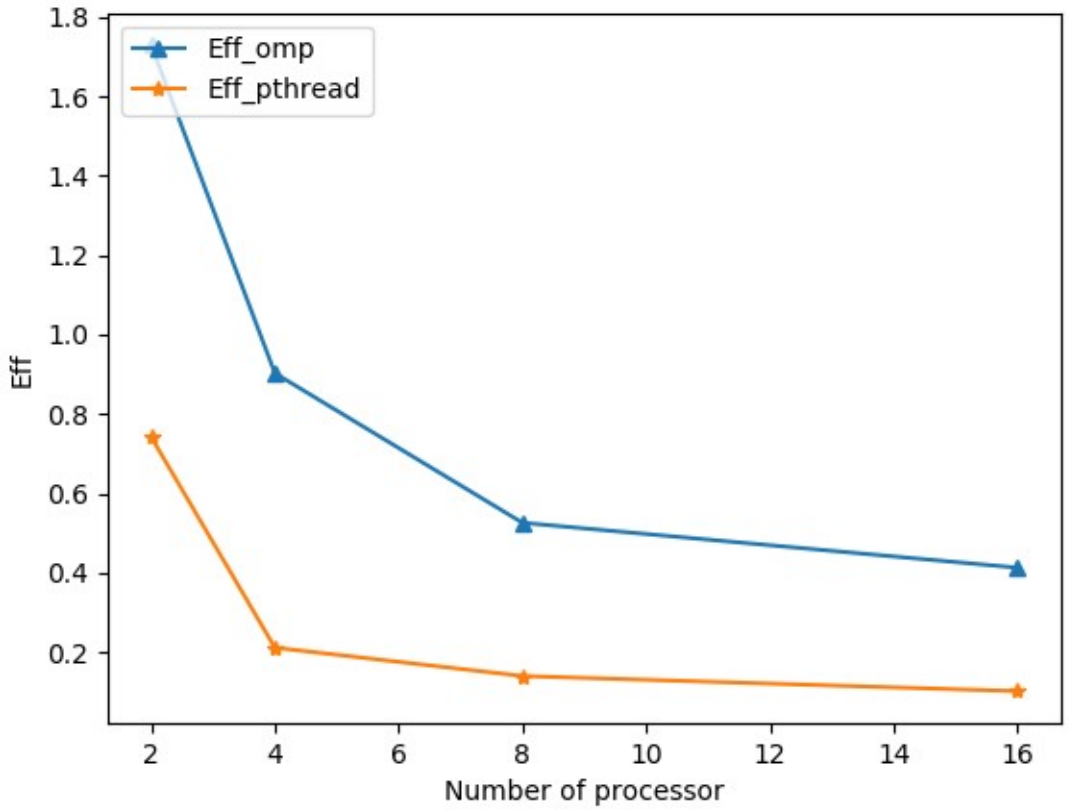


Y-Axis=Time(s)
EFFICIENCY

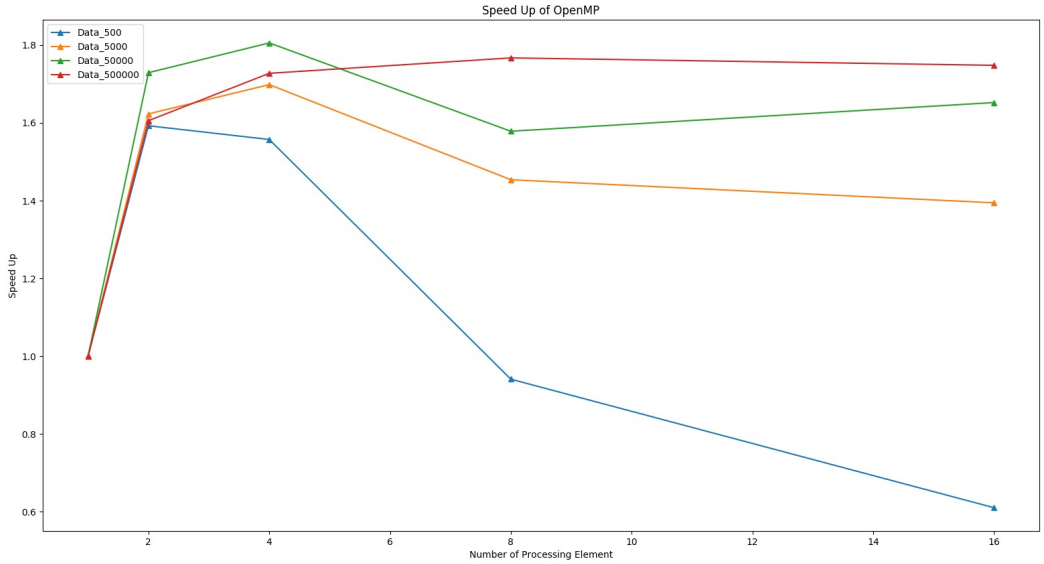


Fixed Number of processor but different data_size
Pthread efficency is really compare to OpenMP

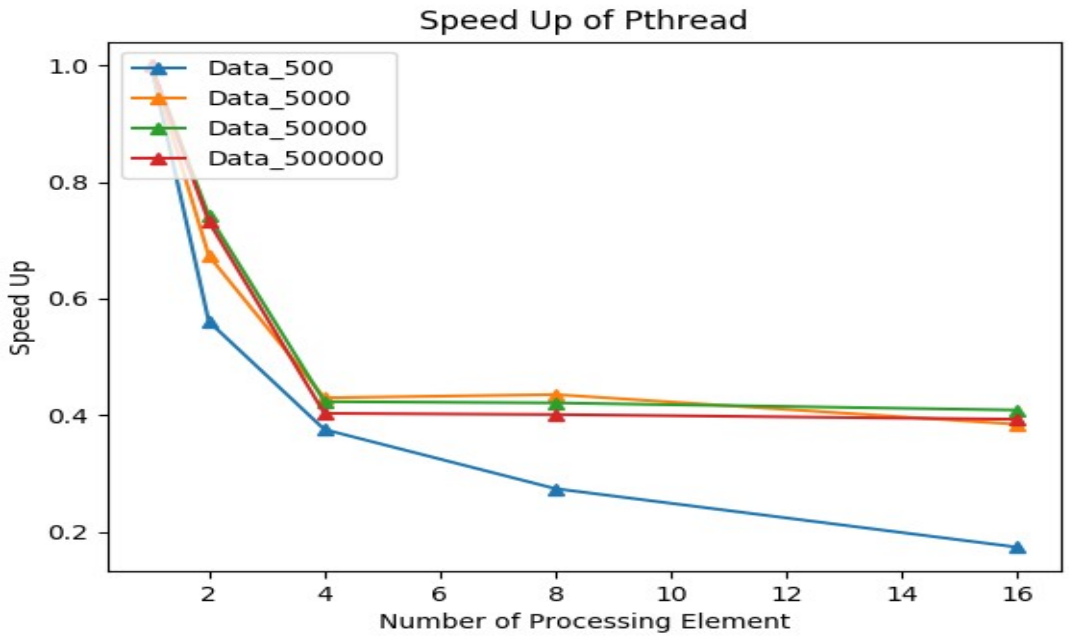
FIXED PROBLEM SIZE BUT NUMBER OF PROCESSOR VARY



Speed Up for OMP



Speed Up of Pthread



Performance detoriate for Pthreads!!

Design Decision

Select the right Implementation which is easily convertable to parallel code.

Parallelising Startegy

Parallelise two part of the algorithm.1)Assigning Clusters to data points.2)Recompute the centroid location of each cluster.

Load Balancing

The array in code code gets equally divided and each thread almost get equal work load.