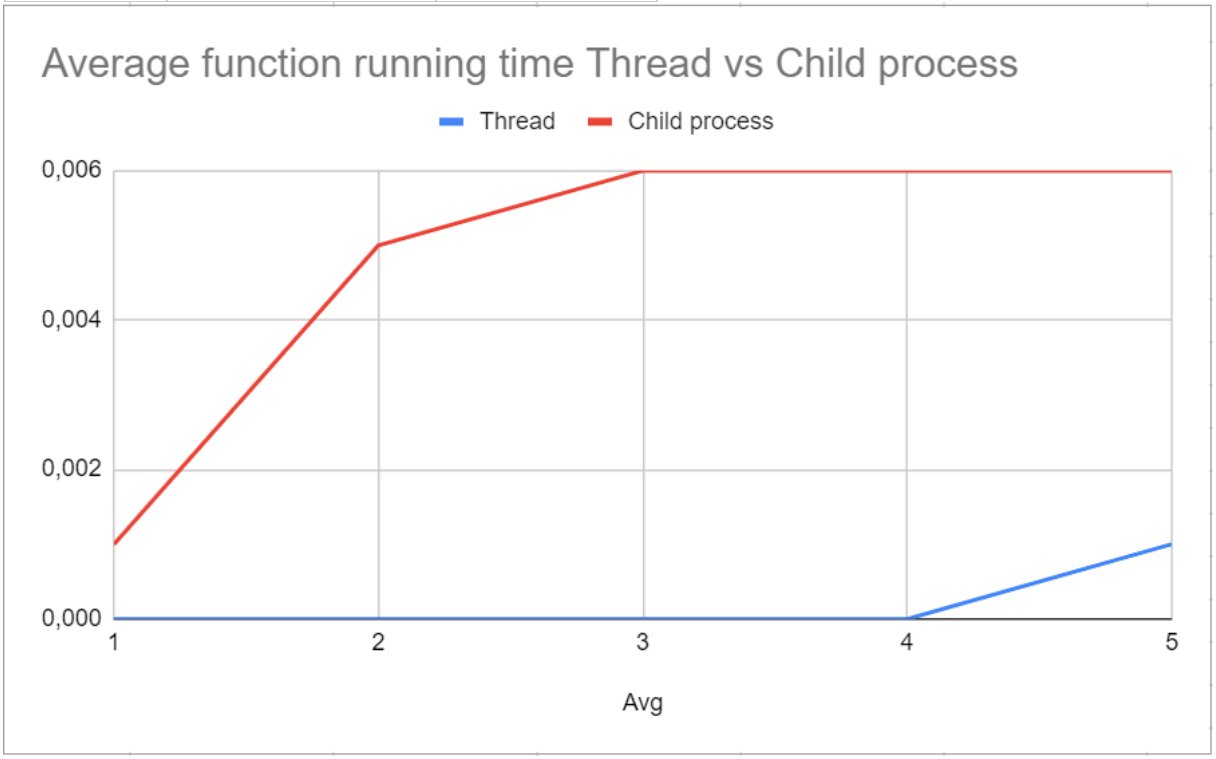
Kerem Alemdar 21702133 CS342 Project 1

c)

When i calculate running time of a single operation it was too small and comparison was hard. For example graph for running time and number of average function is as follows:

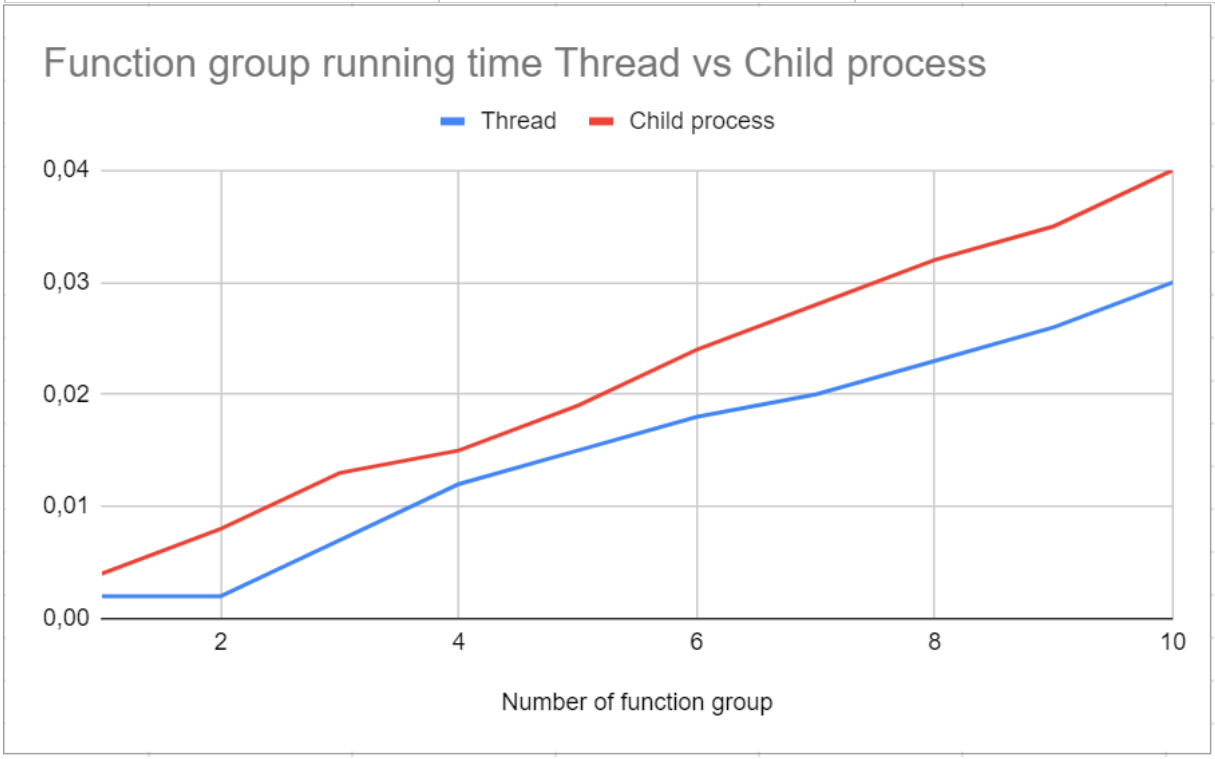
Avg	Thread	Fork
1	0	0,001
2	0	0,005
3	0	0,006
4	0	0,006
5	0,001	0,006



So in a single run i calculated all operations once, (avg , avg<start><end>, count, count <start><end>, max, range <start><end><K>) and in my table function group means running all of those functions once.

Number of function group	Thread	Fork
1	0	0,004
2	0	0,008
3	0,007	0,013
4	0,012	0,015
5	0	0,019
6	0,018	0,024
7	0,02	0,028

8	0,023	0,032
9	0,026	0,035
10	0,03	0,04



It seems like thread usage is faster than child process usage but results could depend from system to system for example whether system is single core or multiple core could depend. I think more experiments should be done before coming to a firm conclusion.