HW2 Report

First, program starts to read 30 bytes from the input file. For each 30 bytes, the child process is created, and necessary information is passed to the child process. Child processes create the covariance matrix from the given bytes. Locks the output file, writes the covariance matrix and index of itself to the file and then unlocks the file. Parent process waits for all children processes to do these operations. When all the child processes are done, parent process reads the covariance matrixes from the output file and creates a list of matrixes. For each matrix frobenius norm is calculated and saved to the norms array. For each frobenius norm, distance between norms comes before this norm and the norm is calculated. If it is the smallest ever found, then matrixes indexes and their distances are saved.

Signal handler holds a flag which means than SIGINT is sent. In different parts of the program, flag is checked and if the flag is true, than program prepared to be killed (open files are closed, allocated spaces are deallocated, locked files are unlocked).

I belive, there is no failed requirement.

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