

E03

The program checks that the `threshold` has been passed as a parameter from the command line, then it opens the file with flags `O_RDWR` and retrieves its size through the `stat()` function.

Then a memory map is performed by means of the `mmap()` function, and a thread is created to start the computation on the vector. Every thread checks whether the difference between `right` and `left` is lower than the `threshold`: in that case, we simply go back to a sequential version; in the other case, the thread performs its tasks and then creates and joins two children threads.

The arguments are passed to the threads through a struct containing the value of `left`, `right`, `v`.

At the end, the file is unmapped from memory (`munmap()`) and the file descriptor is closed.