Lab #4

The purpose of this lab is to learn how to find performance problems using the profiling tools discussed (gprof/gcov, cachegrind/cg_annotate, and callgrind/callgrind_annotate). The executable produced by compiling `filebug.c` takes two command line arguments, a file name and the number of bytes that it should write into that file. However, the program takes a long time to execute (almost a minute for a file of 900,000 bytes). The program can be sped-up by a factor of about 50× while still producing the same output. Find where the inefficiency is and submit the corrected program along with a readme file that explain your fix. As usual, the code can be pulled by simply running:

```
git pull
```

from your shell on the virtual machine. When you are done (and have fixed the bugs), don't forget to commit the changes and push them back up with:

```
git commit -a -m "filebug works faster now!"
git push
```

Good luck!