# Tests

| **Test #** | **Test procedure / description** | **Expected Outcome** | **Actual Outcome & Remarks** | **Pass / Fail** |
| --- | --- | --- | --- | --- |
| 1 | Compiles a program used to test the FindFactorsTask class.   1. make clean 2. make FindFactorsTaskTest 3. valgrind ./FindFactorsTaskTest.out | The FindFactorsTaskTest is run and prints out all the numbers that 1000 is divisibe by, and shows that there are no memory leaks | As expected | Pass |
| 2 | Compiles a program used to test the Number class.   1. make clean 2. make NumberTest 3. valgrind ./NumberTest.out | The program is run and valgrind shows that there are no memory leaks | As expected | Pass |
| 3 | Compiles the process version of the application and runs it.   1. make clean 2. make Processes-Main 3. valgrind ./Processes-Main.out 100000 ./file | * The program is run and valgrind shows that there are no memory leaks. * It also creates a file in the current directory named “file” that contains what was printed to the screen within. * Output on stdout shows all the factors of 100000 starting at 1, ending at 100000. | As expected | Pass |
| 4 | Compiles the threaded version of the application and runs it.   1. make clean 2. make Threads-Main 3. valgrind ./Threads-Main.out 100000 ./file | Same as test 3 | As expected | Pass |

# Screenshots

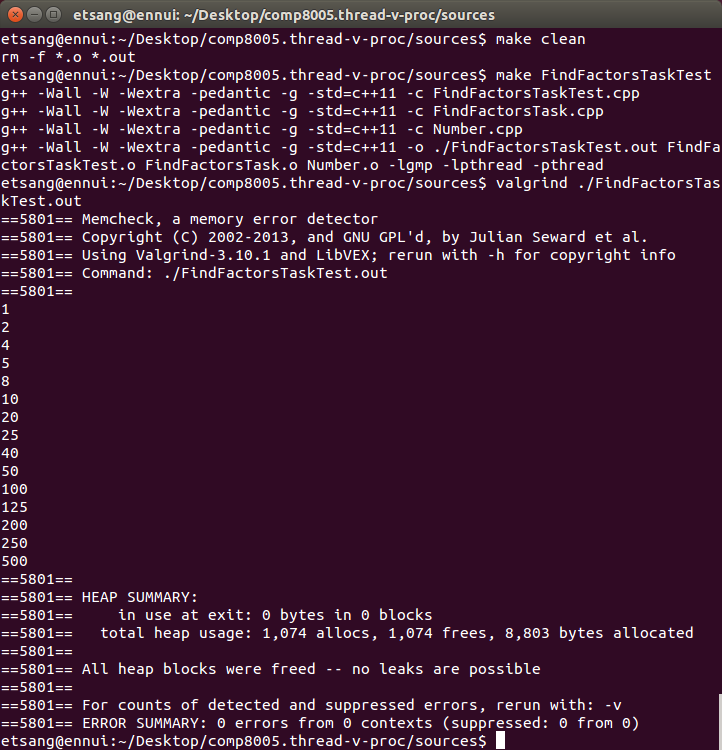
Illustration 1: screenshot of test 1

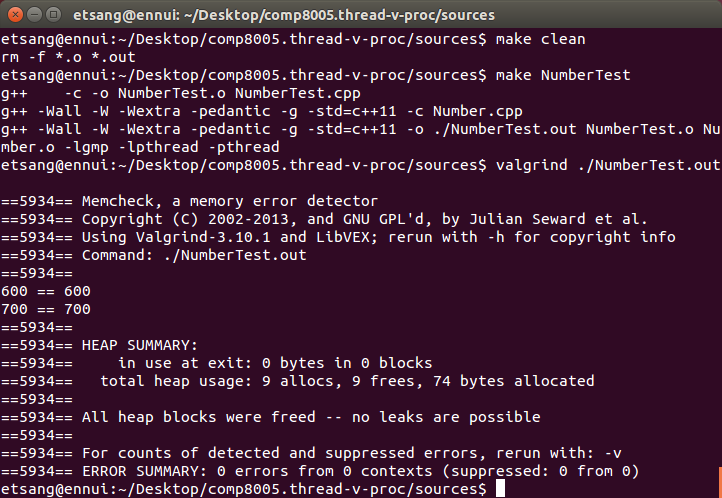
Illustration 2: screenshot of test 2..valgrind shows 0 errors and 0 memory leaks

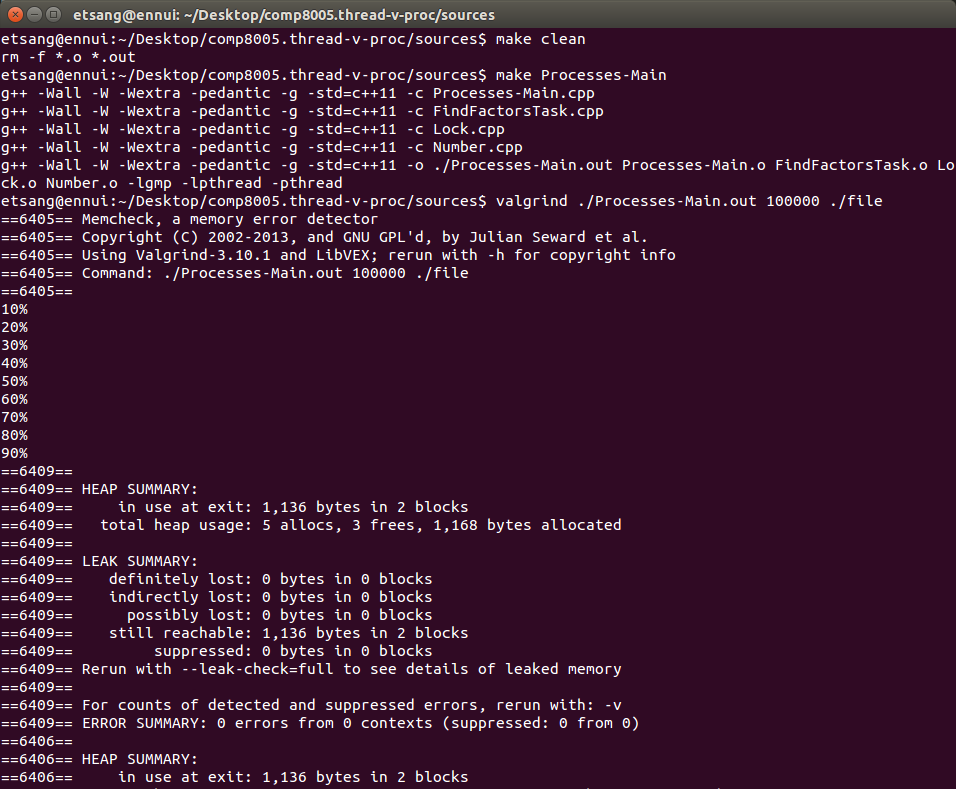
Illustration 3: screenshot of test 3

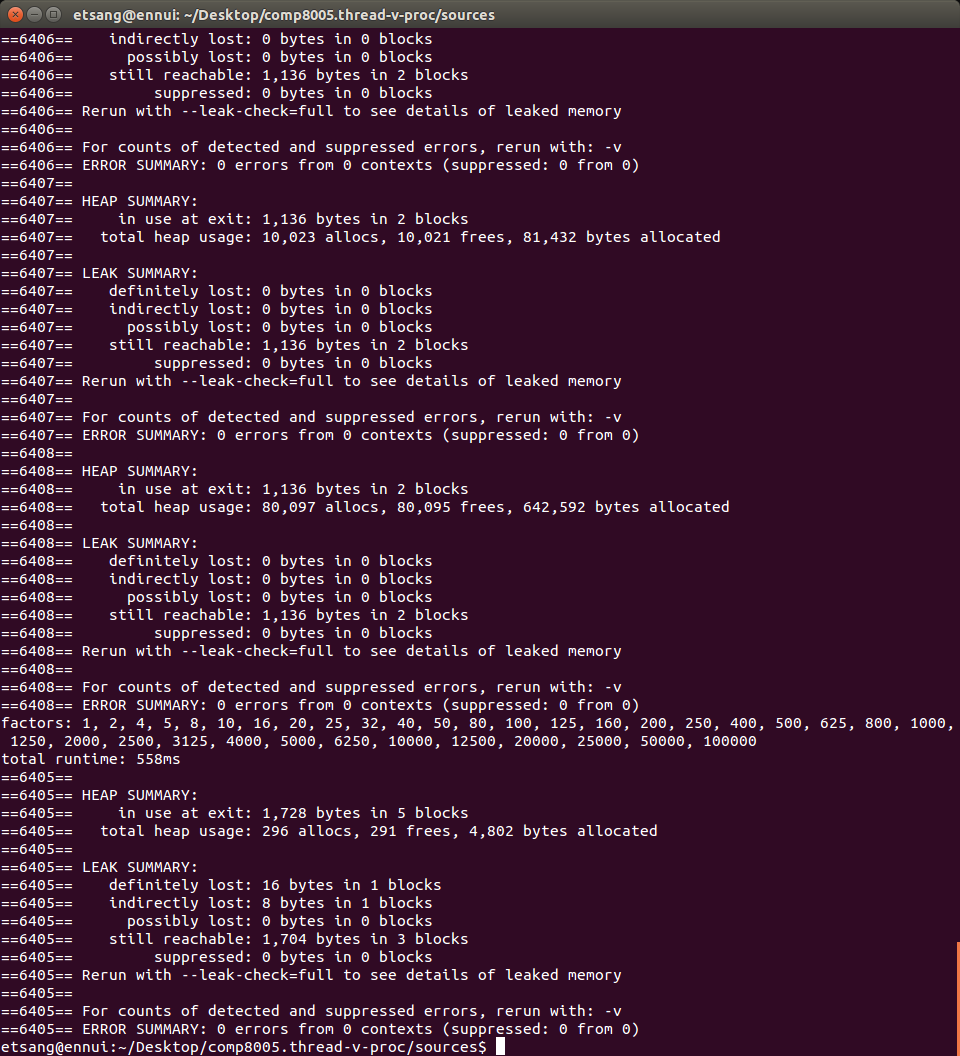
Illustration 4: test 3: more valgrind results of the processes version of the probram

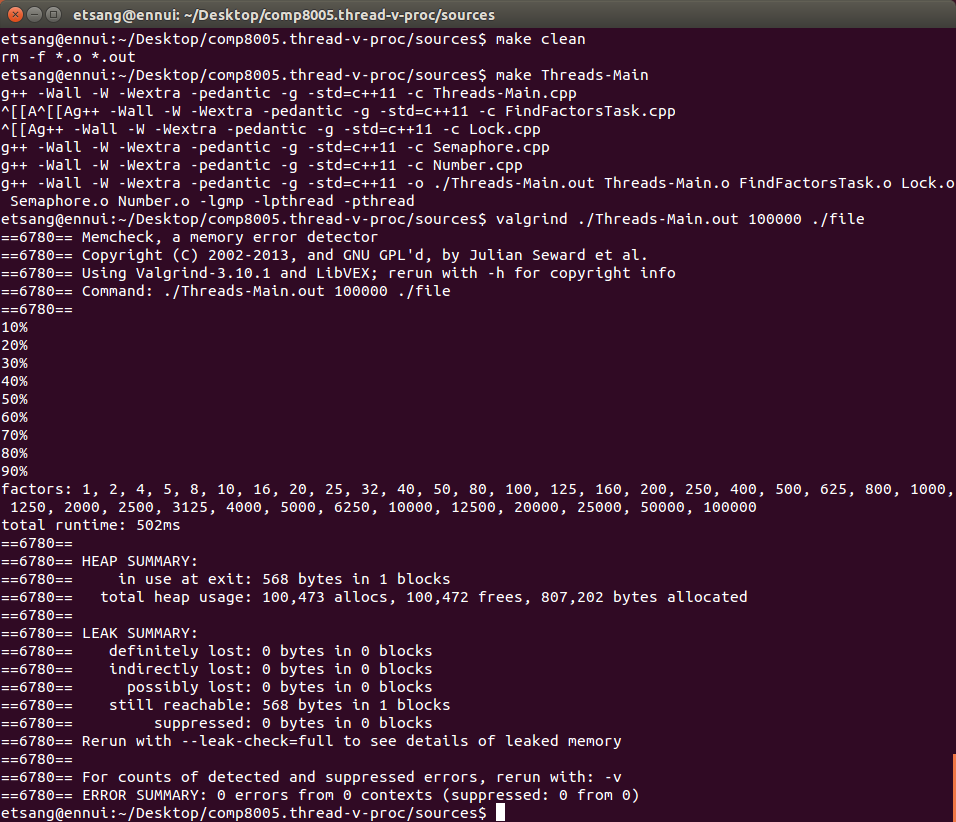
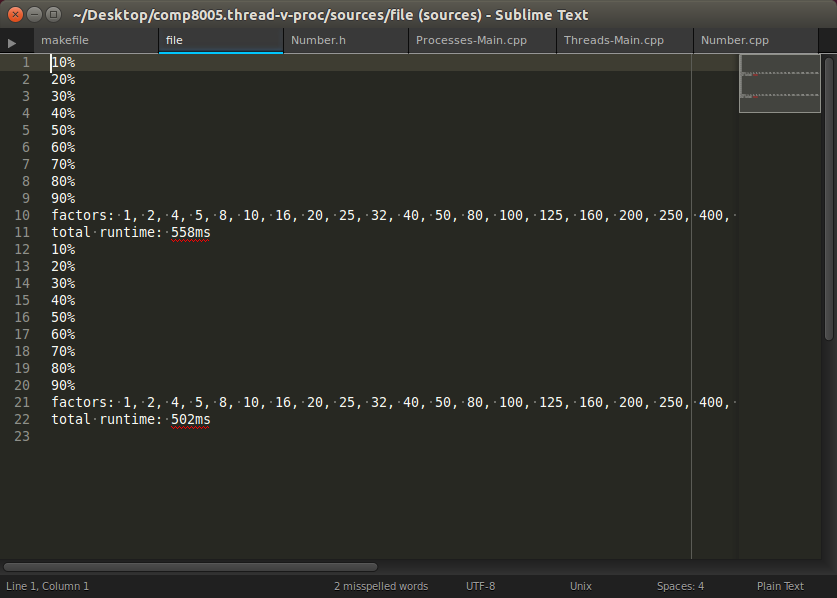
Illustration 5: screenshot of test 4. valgrind shows zero memory leaks.

Illustration 6: output to the file "file" from tests 3 and 4