
Subject: GuiMT example does not calculate all divisors...

Posted by [mr_ped](#) on Tue, 18 Sep 2007 01:03:18 GMT

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It goes only to \sqrt{N} during testing for zero remainders ($N \bmod A == 0$).

That is enough to find all divisors, but you need to show not only A, but also $B = N/A$.

(it's not important in any way to the MT thing, but ... well ... I like when things are exact and accurate)

I would change this:

```
void WorkerThread(DivisorsInfo f)
```

```
{
  String r1, r2;
  int divisors = 0;
  uint64 max = (uint64)sqrt((double)f.number) + 1;
  for(uint64 i = 1; i < max; i++) {
    if(f.gui->terminated)
      break;
    if(f.number % i == 0) {
      r1 << ' ' << i;
      divisors++;
      uint64 j = f.number / i;
      if ( j != i ) {
        r2 = " " + AsString(j) + r2;
        divisors++;
      }
      PostCallback(callback2(f.gui, &Divisors::ShowResult, f.line, "working..." + r1 + r2));
    }
  }
  PostCallback(callback2(f.gui, &Divisors::ShowResult, f.line, AsString(divisors) + ": " + r1 + r2));
  AtomicDec(f.gui->threads);
}
```
