IVS - Profiling

TheCalcIsALie

28. dubna 2022

Program prošel 1000000 vzorků a nebylo u něj zjištěno žádné zpomalení nebo možnost pro optimalizaci. Níže jsou snímky obrazovky z profileru a grafické vyobrazení procesů při výpočtu směrodatné odchylky.

profiling.gprof – Poznámkový blok

Soubor Úpravy Formát Zobrazení Nápověda

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Flat profile:

Each sample counts as 0.01 seconds.
  %   cumulative   self              self     total
 time   seconds   seconds    calls  ms/call  ms/call  name
 26.60      0.17     0.17                             main
 15.65      0.27     0.10 20000002     0.00     0.00  bool __gnu_cxx::operator!=<long double*, std::vector<long double, std::allocator<long double> > >(__gnu_cxx::__normal_iterator<long double*, std::vector<long double, std::allocator<lo
 12.52      0.35     0.08 10000000     0.00     0.00  void __gnu_cxx::new_allocator<long double>::construct<long double, long double const&>(long double*, long double const&)
 12.52      0.43     0.08 10000000     0.00     0.00  MathLib::pow(double, double)
 10.95      0.50     0.07 40000104     0.00     0.00  __gnu_cxx::__normal_iterator<long double*, std::vector<long double, std::allocator<long double> > >::base() const
  3.13      0.52     0.02 20000025     0.00     0.00  long double const& std::forward<long double const&>(std::remove_reference<long double const&>::type&)
  3.13      0.54     0.02 20000000     0.00     0.00  __gnu_cxx::__normal_iterator<long double*, std::vector<long double, std::allocator<long double> > >::operator++()
  3.13      0.56     0.02 10000000     0.00     0.00  std::vector<long double, std::allocator<long double> >::push_back(long double const&)
  3.13      0.58     0.02        1    20.03   120.55  average(std::vector<long double, std::allocator<long double> >, long double)
  2.35      0.60     0.02 10000000     0.00     0.00  MathLib::minus(double, double)
  1.56      0.61     0.01 20000000     0.00     0.00  MathLib::sum(double, double)
  1.56      0.62     0.01 10000000     0.00     0.00  void std::allocator_traits<std::allocator<long double> >::construct<long double, long double const&>(std::allocator<long double>&, long double*, long double const&)
  1.56      0.63     0.01 10000000     0.00     0.00  std::abs(double)
  1.56      0.64     0.01       54     0.19     0.19  __gnu_cxx::__normal_iterator<long double*, std::vector<long double, std::allocator<long double> > >::__normal_iterator(long double* const&)
  0.78      0.64     0.01        1     5.01     5.01  MathLib::multi(double, double)
  0.00      0.64     0.00 20000000     0.00     0.00  __gnu_cxx::__normal_iterator<long double*, std::vector<long double, std::allocator<long double> > >::operator*() const
  0.00      0.64     0.00 10000000     0.00     0.00  operator new(unsigned long, void*)
  0.00      0.64     0.00      151     0.00     0.00  long double* std::__niter_base<long double*>(long double*)
  0.00      0.64     0.00      101     0.00     0.00  std::vector<long double, std::allocator<long double> >::size() const
  0.00      0.64     0.00       76     0.00     0.00  __gnu_cxx::new_allocator<long double>::max_size() const
  0.00      0.64     0.00       53     0.00     0.00  std::_Vector_base<long double, std::allocator<long double> >::_M_get_Tp_allocator()
  0.00      0.64     0.00       51     0.00     0.00  std::_Vector_base<long double, std::allocator<long double> >::_M_get_Tp_allocator() const
  0.00      0.64     0.00       50     0.00     0.00  std::vector<long double, std::allocator<long double> >::max_size() const
  0.00      0.64     0.00       50     0.00     0.00  std::allocator_traits<std::allocator<long double> >::max_size(std::allocator<long double> const&)
  0.00      0.64     0.00       50     0.00     0.00  std::vector<long double, std::allocator<long double> >::_S_max_size(std::allocator<long double> const&)
  0.00      0.64     0.00       50     0.00     0.00  std::vector<long double, std::allocator<long double> >::_S_relocate(long double*, long double*, long double*, std::allocator<long double>&)
  0.00      0.64     0.00       50     0.00     0.00  std::vector<long double, std::allocator<long double> >::_S_do_relocate(long double*, long double*, long double*, std::allocator<long double>&, std::integral_constant<bool, true>)
  0.00      0.64     0.00       50     0.00     0.00  long double* std::__relocate_a<long double*, long double*, std::allocator<long double> >(long double*, long double*, long double*, std::allocator<long double>&)
  0.00      0.64     0.00       50     0.00     0.00  std::enable_if<std::__is_bitwise_relocatable<long double, void>::value, long double*>::type std::__relocate_a_1<long double, long double>(long double*, long double*, long double*, std
  0.00      0.64     0.00       50     0.00     0.00  unsigned long const& std::min<unsigned long>(unsigned long const&, unsigned long const&)
  0.00      0.64     0.00       27     0.00     0.00  std::_Vector_base<long double, std::allocator<long double> >::_M_deallocate(long double*, unsigned long)
  0.00      0.64     0.00       27     0.00     0.19  std::vector<long double, std::allocator<long double> >::end()
  0.00      0.64     0.00       27     0.00     0.19  std::vector<long double, std::allocator<long double> >::begin()
  0.00      0.64     0.00       26     0.00     0.00  __gnu_cxx::new_allocator<long double>::deallocate(long double*, unsigned long)
  0.00      0.64     0.00       26     0.00     0.00  __gnu_cxx::new_allocator<long double>::allocate(unsigned long, void const*)
  0.00      0.64     0.00       26     0.00     0.00  std::_Vector_base<long double, std::allocator<long double> >::_M_allocate(unsigned long)
  0.00      0.64     0.00       26     0.00     0.00  std::allocator_traits<std::allocator<long double> >::deallocate(std::allocator<long double>&, long double*, unsigned long)
  0.00      0.64     0.00       26     0.00     0.00  std::allocator_traits<std::allocator<long double> >::allocate(std::allocator<long double>&, unsigned long)
  0.00      0.64     0.00       25     0.00     0.00  __gnu_cxx::__normal_iterator<long double*, std::vector<long double, std::allocator<long double> > >::difference_type __gnu_cxx::operator-<long double*, std::vector<long double, std::a
  0.00      0.64     0.00       25     0.00     0.00  std::vector<long double, std::allocator<long double> >::_M_check_len(unsigned long, char const*) const
  0.00      0.64     0.00       25     0.00     0.19  void std::vector<long double, std::allocator<long double> >::_M_realloc_insert<long double const&>(__gnu_cxx::__normal_iterator<long double*, std::vector<long double, std::allocator<l
  0.00      0.64     0.00       25     0.00     0.00  unsigned long const& std::max<unsigned long>(unsigned long const&, unsigned long const&)
  0.00      0.64     0.00        3     0.00     0.00  __gnu_cxx::new_allocator<long double>::~new_allocator()
  0.00      0.64     0.00        3     0.00     0.00  std::allocator<long double>::~allocator()
  0.00      0.64     0.00        2     0.00     0.00  MathLib::delit(double, double)
  0.00      0.64     0.00        2     0.00     0.00  __gnu_cxx::new_allocator<long double>::new_allocator(__gnu_cxx::new_allocator<long double> const&)
  0.00      0.64     0.00        2     0.00     0.00  __gnu_cxx::__normal_iterator<long double const*, std::vector<long double, std::allocator<long double> > >::__normal_iterator(long double const* const&)
  0.00      0.64     0.00        2     0.00     0.00  __gnu_cxx::__normal_iterator<long double const*, std::vector<long double, std::allocator<long double> > >::base() const
  0.00      0.64     0.00        2     0.00     0.00  std::allocator<long double>::allocator(std::allocator<long double> const&)
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