Předmět:	AVS - Architektury výpočetních systémů 2023/2024
Dílčí hodnocení:	projekty
Datum hodnocení:	28.11.2023
Vyučující:	Jaroš Marta, Ing., Ph.D.
Student:	Mihola David, Bc.
Body:	10
Splněno:	✔

Text zprávy:

Hodnoceni prvniho projektu AVS: xmihol00

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Vektorizace po radcich

+1.00 b: spravnost vystupu: (error = 0.012%) (max 1 b)

+1.00 b: cas 893 ms do limitu 1300 ms (a spravny vystup) (max 1 b)

Reseni se umistilo mezi 33.67% nejrychlejsimi resenimi

Vektorizace po blocich

+1.00 b: spravnost vystupu: (error = 0.029%) (max 1 b)

+1.00 b: cas 122 ms do limitu 420 ms (a spravny vystup) (max 1 b)

+1.00 b: cas 122 ms do limitu 580 ms (a spravny vystup) (max 1 b)

+1.00 b: cas 122 ms do limitu 930 ms (a spravny vystup) (max 1 b)

Reseni se umistilo mezi 0.00% nejrychlejsimi resenimi

Odpovedi, implementace a grafy

+1.00 b: Ukoncovaci smycka (Q1) (max 1 b)

+1.00 b: Neefektivita line (Q2) (max 1 b)

+1.00 b: Analyza v Intel Tools (Q3,Q4,Q5) (max 1 b)

+1.00 b: Graf evaluace (max 1 b)

Celkem ziskano: 10.0 bodu

Komentar

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Log kompilace (stdout)

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-- The C compiler identification is Intel 2021.6.0.20220226

-- The CXX compiler identification is Intel 2021.6.0.20220226

-- Detecting C compiler ABI info

-- Detecting C compiler ABI info - done

-- Check for working C compiler: /apps/all/intel-
compilers/2022.1.0/compiler/2022.1.0/linux/bin/intel64/icc - skipped

-- Detecting C compile features

-- Detecting C compile features - done

-- Detecting CXX compiler ABI info

-- Detecting CXX compiler ABI info - done

-- Check for working CXX compiler: /apps/all/intel-
compilers/2022.1.0/compiler/2022.1.0/linux/bin/intel64/icpc - skipped

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-- Detecting CXX compile features
-- Detecting CXX compile features - done
-- Found ZLIB: /apps/all/zlib/1.2.12-GCCcore-11.3.0/lib/libz.so (found version "1.2.12")
-- Configuring done
-- Generating done
-- Build files have been written to:
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00
/apps/all/CMake/3.23.1-GCCcore-11.3.0/bin/cmake -
S/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00 -
B/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00 --check-build-system
CMakeFiles/Makefile.cmake 0
/apps/all/CMake/3.23.1-GCCcore-11.3.0/bin/cmake -E cmake_progress_start
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/CMakeFiles
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00//CMakeFiles/progress.marks
make -f CMakeFiles/Makefile2 all
make[1]: Entering directory '/scratch/project/dd-23-135/eval-proj01-new/xmihol00'
make -f CMakeFiles/mandelbrot.dir/build.make CMakeFiles/mandelbrot.dir/depend
make[2]: Entering directory '/scratch/project/dd-23-135/eval-proj01-new/xmihol00'
cd /home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00 &&
/apps/all/CMake/3.23.1-GCCcore-11.3.0/bin/cmake -E cmake_depends "Unix Makefiles"
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/CMakeFiles/mandelbrot.dir/DependInfo.c
--color=
make[2]: Leaving directory '/scratch/project/dd-23-135/eval-proj01-new/xmihol00'
make -f CMakeFiles/mandelbrot.dir/build.make CMakeFiles/mandelbrot.dir/build
make[2]: Entering directory '/scratch/project/dd-23-135/eval-proj01-new/xmihol00'
[ 14%] Building CXX object CMakeFiles/mandelbrot.dir/calculators/BaseMandelCalculator.cc.o
/apps/all/intel-compilers/2022.1.0/compiler/2022.1.0/linux/bin/intel64/icpc -
I/apps/all/zlib/1.2.12-GCCcore-11.3.0/include -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/common -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators -O3 -
mavx2 -xHost -g -qopenmp-simd -qopt-report=1 -qopt-report-phase=vec -std=gnu++11 -MD -MT
CMakeFiles/mandelbrot.dir/calculators/BaseMandelCalculator.cc.o -MF
CMakeFiles/mandelbrot.dir/calculators/BaseMandelCalculator.cc.o.d -o
CMakeFiles/mandelbrot.dir/calculators/BaseMandelCalculator.cc.o -c
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators/BaseMandelCalculator.cc
[ 28%] Building CXX object
CMakeFiles/mandelbrot.dir/calculators/BatchMandelCalculator.cc.o
/apps/all/intel-compilers/2022.1.0/compiler/2022.1.0/linux/bin/intel64/icpc -
I/apps/all/zlib/1.2.12-GCCcore-11.3.0/include -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/common -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators -O3 -
mavx2 -xHost -g -qopenmp-simd -qopt-report=1 -qopt-report-phase=vec -std=gnu++11 -MD -MT
CMakeFiles/mandelbrot.dir/calculators/BatchMandelCalculator.cc.o -MF
CMakeFiles/mandelbrot.dir/calculators/BatchMandelCalculator.cc.o.d -o
CMakeFiles/mandelbrot.dir/calculators/BatchMandelCalculator.cc.o -c
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators/BatchMandelCalculator.cc
[ 42%] Building CXX object CMakeFiles/mandelbrot.dir/calculators/LineMandelCalculator.cc.o
/apps/all/intel-compilers/2022.1.0/compiler/2022.1.0/linux/bin/intel64/icpc -
I/apps/all/zlib/1.2.12-GCCcore-11.3.0/include -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/common -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators -O3 -
mavx2 -xHost -g -qopenmp-simd -qopt-report=1 -qopt-report-phase=vec -std=gnu++11 -MD -MT
CMakeFiles/mandelbrot.dir/calculators/LineMandelCalculator.cc.o -MF
```

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CMakeFiles/mandelbrot.dir/calculators/LineMandelCalculator.cc.o.d -o
CMakeFiles/mandelbrot.dir/calculators/LineMandelCalculator.cc.o -c
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators/LineMandelCalculator.cc
[ 57%] Building CXX object CMakeFiles/mandelbrot.dir/calculators/RefMandelCalculator.cc.o
/apps/all/intel-compilers/2022.1.0/compiler/2022.1.0/linux/bin/intel64/icpc -
I/apps/all/zlib/1.2.12-GCCcore-11.3.0/include -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/common -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators -O3 -
mavx2 -xHost -g -qopenmp-simd -qopt-report=1 -qopt-report-phase=vec -std=gnu++11 -MD -MT
CMakeFiles/mandelbrot.dir/calculators/RefMandelCalculator.cc.o -MF
CMakeFiles/mandelbrot.dir/calculators/RefMandelCalculator.cc.o.d -o
CMakeFiles/mandelbrot.dir/calculators/RefMandelCalculator.cc.o -c
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators/RefMandelCalculator.cc
[ 71%] Building CXX object CMakeFiles/mandelbrot.dir/common/cnpy.cc.o
/apps/all/intel-compilers/2022.1.0/compiler/2022.1.0/linux/bin/intel64/icpc -
I/apps/all/zlib/1.2.12-GCCcore-11.3.0/include -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/common -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators -O3 -
mavx2 -xHost -g -qopenmp-simd -qopt-report=1 -qopt-report-phase=vec -std=gnu++11 -MD -MT
CMakeFiles/mandelbrot.dir/common/cnpy.cc.o -MF
CMakeFiles/mandelbrot.dir/common/cnpy.cc.o.d -o
CMakeFiles/mandelbrot.dir/common/cnpy.cc.o -c
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/common/cnpy.cc
[ 85%] Building CXX object CMakeFiles/mandelbrot.dir/main.cc.o
/apps/all/intel-compilers/2022.1.0/compiler/2022.1.0/linux/bin/intel64/icpc -
I/apps/all/zlib/1.2.12-GCCcore-11.3.0/include -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/common -
I/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/calculators -O3 -
mavx2 -xHost -g -qopenmp-simd -qopt-report=1 -qopt-report-phase=vec -std=gnu++11 -MD -MT
CMakeFiles/mandelbrot.dir/main.cc.o -MF CMakeFiles/mandelbrot.dir/main.cc.o.d -o
CMakeFiles/mandelbrot.dir/main.cc.o -c
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/main.cc
[100%] Linking CXX executable mandelbrot
/apps/all/CMake/3.23.1-GCCcore-11.3.0/bin/cmake -E cmake_link_script
CMakeFiles/mandelbrot.dir/link.txt --verbose=1
/apps/all/intel-compilers/2022.1.0/compiler/2022.1.0/linux/bin/intel64/icpc -O3 -mavx2 -
xHost -g -qopenmp-simd -qopt-report=1 -qopt-report-phase=vec
CMakeFiles/mandelbrot.dir/calculators/BaseMandelCalculator.cc.o
CMakeFiles/mandelbrot.dir/calculators/BatchMandelCalculator.cc.o
CMakeFiles/mandelbrot.dir/calculators/LineMandelCalculator.cc.o
CMakeFiles/mandelbrot.dir/calculators/RefMandelCalculator.cc.o
CMakeFiles/mandelbrot.dir/common/cnpy.cc.o CMakeFiles/mandelbrot.dir/main.cc.o -o
mandelbrot /apps/all/zlib/1.2.12-GCCcore-11.3.0/lib/libz.so
make[2]: Leaving directory '/scratch/project/dd-23-135/eval-proj01-new/xmihol00'
[100%] Built target mandelbrot
make[1]: Leaving directory '/scratch/project/dd-23-135/eval-proj01-new/xmihol00'
/apps/all/CMake/3.23.1-GCCcore-11.3.0/bin/cmake -E cmake_progress_start
/home/icudova/Vyuka/AVS/Assignments/01/Evaluation/eval/xmihol00/CMakeFiles 0
```

Log kompilace (stderr)

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================================================================================
icpc: remark #10397: optimization reports are generated in *.optrpt files in the output location
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icpc: remark #10397: optimization reports are generated in *.optrpt files in the output location
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Log line (stdout)
==
line
LineMandelCalculator;4096;12288;8192;100;893
LineMandelCalculator;4096;12288;8192;100;895
LineMandelCalculator;4096;12288;8192;100;893
[ok] Results are very close (eps = 0.012%)

Log line (stderr)
==

Log batch (stdout)
==
batch
BatchMandelCalculator;4096;12288;8192;100;122
BatchMandelCalculator;4096;12288;8192;100;123
BatchMandelCalculator;4096;12288;8192;100;109
[ok] Results are very close (eps = 0.029%)

Log batch (stderr)
==