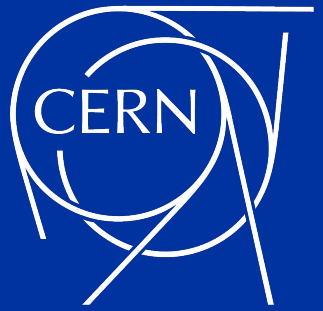

Exercise 1: Performance Analysis with perf

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Performance Analysis with perf

- mkdir /home/<user>
- cp -R /home/tcsc24/exercises/ /home/<user>/
- cd /home/<user>/exercises
- cmake -S . -B build
- cmake --build build --parallel 8
- cd build && ctest
- perf stat -d -M TopdownL1 -- <exercise> (e.g. ctest -R <test_name> or ctest -I <N>)
- perf stat --topdown <exercise>
- perf record -e cycles:p --callgraph=fp <exercise>
- perf report # explore the TUI, annotate the function within the interface
- perf annotate <function_name>

Exercise 2: Performance Optimization

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Performance Optimization

- Please choose from the exercises of yesterday some problems to optimize
  - There is a README.md file at the top directory and in each subdirectory
  - We do not have time to solve them all, as there are many exercises to choose from
  - Some problems may require longer time, if you get stuck, try another one
  - You are free to pick the exercise you like best
- Recommended exercises
  - Start with the matrix multiplication exercise (same steps as yesterday)
  - Try to pick exercises from different categories for the second and later
  - Set a fixed number of iterations with `->Iterations(N)` (N depends on each case)