The \texttt{l3benchmark} package
Experimental benchmarking

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\section{Benchmark}

\begin{verbatim}
\g_benchmark_duration_target_fp
\end{verbatim}

This variable (default value: 1) controls roughly for how long \texttt{benchmark:n} will repeat
code to more accurately benchmark it. The actual duration of one call to \texttt{benchmark:n} typically lasts between half and twice \texttt{g_benchmark_duration_target_fp} seconds, unless of course running the code only once already lasts longer than this.

\begin{verbatim}
\g_benchmark_time_fp \g_benchmark_ops_fp
\end{verbatim}

These variables store the results of the most recently run benchmark. \texttt{g_benchmark-time_fp} stores the time \TeX\ took in seconds, and \texttt{g_benchmark_ops_fp} stores the estimated number of elementary operations. The latter is not set by \texttt{benchmark-tic:}/\texttt{benchmark_toc:}.

\begin{verbatim}
\benchmark_once:n \benchmark_once_silent:n \benchmark:n \benchmark:n\{\langle code\rangle}\benchmark:n
\end{verbatim}

Determines the time \texttt{g_benchmark_time_fp} (in seconds) taken by \TeX\ to run the \langle code\rangle, and an estimated number \texttt{g_benchmark_ops_fp} of elementary operations. In addition, \texttt{benchmark_once:n} prints these values to the terminal. The \langle code\rangle is run only once so the time may be quite inaccurate for fast code.

\begin{verbatim}
\benchmark:n \benchmark:n\{\langle code\rangle\}
\benchmark:n\langle code\rangle \benchmark:n
\end{verbatim}

Determines the time \texttt{g_benchmark_time_fp} (in seconds) taken by \TeX\ to run the \langle code\rangle, and an estimated number \texttt{g_benchmark_ops_fp} of elementary operations. In addition, \texttt{benchmark:n} prints these values to the terminal. The \langle code\rangle may be run many times and not within a group, thus code with side-effects may cause problems.

\begin{verbatim}
\benchmark_tic: \benchmark_toc: \benchmark_tic: \langle slow code\rangle \benchmark_toc:
\end{verbatim}

When it is not possible to run \texttt{benchmark:n} (e.g., the code is part of the execution of a package which cannot be looped) the tic/toc commands can be used instead to time between two points in the code. When executed, \texttt{benchmark_tic:} will print a line to the terminal, and \texttt{benchmark_toc:} will print a matching line with a time to indicate the duration between them in seconds. These commands can be nested.
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benchmark commands:
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\g_benchmark_duration_target_fp \hfill \benchmark_silent:n
\benchmark_once:n \hfill \g_benchmark_time_fp
\benchmark_once_silent:n \hfill \benchmark_tic:
\benchmark_toc: