Here is an example of a LaTeX file which uses many things.
The input file is called example.tex
The input file appears at the end of this output.

1 First

Razborov in [1] proved Lower Bounds on Depth 3 Threshold Circuits ... and much more.

2 Second

We saw in Section 1 that Razborov proved all kinds of things.

3 Third

And here it is on a new page:We saw in Section 1 that Razborov proved all kinds of things.

4 To make it Work

Assume this file is called **example.tex**:

1. Comment-out the `\input{example.ind}` line
2. Run **latex example**
3. Run **bibtex example** (it really looks only at the .aux file)
4. Run **makeindex example** (produces .ind and .ilg files)
5. Uncomment the `\input{example.ind}` line
6. Run **latex example** again
7. Run **latex example** once more

References

[1] A. Razborov and A. Wigderson. $n^{\Omega(\log n)}$ lower bounds on the size of depth 3 threshold circuits with and gates at the bottom, 1992. Submitted to IPL.

Index

Here's the input.

———————

```
\documentstyle{article}
\makeindex     %%must be in preamble
\begin{document}
\bibliographystyle{plain}

Here is an example of a \LaTeX\ file which uses many things:
{\Large XXX}
\section{First}\label{sec1}
Razborov\index{Razborov} in \cite{RaWi92} proved Lower Bounds
\index{Lower Bounds}\index{Bounds!lower} on Depth 3 Threshold Circuits
\index{Circuits!threshold}\index{Threshold Circuits}
\index{Threshold!circuits!depth 3}\ldots and much more.

\section{Second}
We saw in Section~\ref{sec1} that Razborov\index{Razborov} proved all kinds
of things.
\newpage
\section{Third}
And here it is on a new page:We saw in Section~\ref{sec1} that
Razborov\index{Razborov} proved all kinds of things.

\section{To make it Work}
Assume this file is called {\bf example.tex}:
\begin{enumerate}
\item Comment-out the \verb+\input{example.ind}+ line
\item Run {\bf latex example}
\item Run {\bf bibtex example} (it really looks only at the .aux
 file)
\item Run {\bf makeindex example} (produces .ind and .ilg files)
\item Uncomment the \verb+\input{example.ind}+ line
\item Run {\bf latex example} again
\item Run {\bf latex example} once more
\end{enumerate}
\bibliography{japan} %the bibliography entries are in {\bf japan.bib}
\input{example.ind}
```