

8. Develop a LaTeX script to demonstrate the presentation of Numbered theorems, definitions, corollaries, and lemmas in the document.

```
\documentclass{article}

% Define theorem-like environments

\newtheorem{theorem}[Theorem]{section} % Numbered within sections
\newtheorem{definition}[theorem]{Definition} % Numbered along with theorems
\newtheorem{corollary}[theorem]{Corollary} % Numbered along with theorems
\newtheorem{lemma}[theorem]{Lemma} % Numbered along with theorems

\usepackage{lipsum}

\begin{document}

    \section{Theorems and Definitions}

    \begin{theorem}

        This is a theorem.

        \lipsum[1]

    \end{theorem}

    \begin{definition}

        This is a definition.

        \lipsum[1]

    \end{definition}

    \begin{corollary}

        This is a corollary.

        \lipsum[1]

    \end{corollary}

    \begin{lemma}

        This is a lemma.

        \lipsum[1]

    \end{lemma}

\end{document}
```