

10. Develop a LaTeX script to design a simple tree diagram or hierarchical structure in the document with appropriate labels using the Tikz library

```
\documentclass{article}
```

```
% Import the 'tikz' package for creating diagrams
```

```
\usepackage{tikz}
```

```
\usetikzlibrary{trees}
```

```
\begin{document}
```

```
\title{Simple Tree Diagram or Hierarchical Structure in the Document with  
appropriate}
```

```
Labels using the Tikz Library}
```

```
\date{}
```

```
\maketitle
```

```
% Create a tree diagram
```

```
% Wrap the TikZ picture in a 'center' environment to center the diagram
```

```
\begin{center}
```

```
\begin{tikzpicture}[
```

```
level 1/.style={sibling distance=7cm},
```

```
level 2/.style={sibling distance=4cm},
```

```
level distance=2cm,
```

```
every node/.style={font=\large} % Increase font size here (e.g. \large, \Large)
```

```
]
```

```
% Root node
```

```
\node {Root}
```

% Level 1 nodes

child { node {Child 1}

% Level 2 nodes

child { node {Grandchild 1.1} }

child { node {Grandchild 1.2} }

}

child { node {Child 2}

% Level 2 nodes

child { node {Grandchild 2.1} }

child { node {Grandchild 2.2} }

};

\end{tikzpicture}

\end{center}

\end{document}