11. Develop a LaTeX script to present an algorithm in the document using algorithm/algorithmic/algorithm2e library.

```
\documentclass{article}
\usepackage[ruled, linesnumbered]{algorithm2e}
\begin{document}
\begin{algorithm}[H]
\SetAlgoLined
\SetKwFunction{Dijkstra}{Dijkstra}
\SetKwProg{Fn}{Function}{:}{}
\Fn{\Dijkstra{$G, s$}}{
$d[s] \gets 0$\;
\ForEach{$v \in V$}{
$d[v] \gets \infty$\;
$prev[v] \gets$ undefined\;
}
$Q \gets V$\;
\While{$Q$ is not empty}{
$u \gets$ vertex in $Q$ with minimum $d[u]$\;
Remove $u$ from $Q$\;
\ForEach{$v \in$ neighbors of $u$}{
$alt \gets d[u] + \mathrm{weight}(u, v)$\;
\If{$alt < d[v]$}{
```

$d[v] \gets alt$\;

$prev[v] \gets u$\;

}

}

}

\KwRet{$d[], prev[]$}\;

}

\caption{Dijkstra's Algorithm}

\label{algo:dijkstra}

\end{algorithm}

\end{document}