

Tree Drawing in Latex (14A)

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Please send corrections (or suggestions) to youngwlim@hotmail.com.

This document was produced by using LibreOffice and Octave.

Using qtree (1)

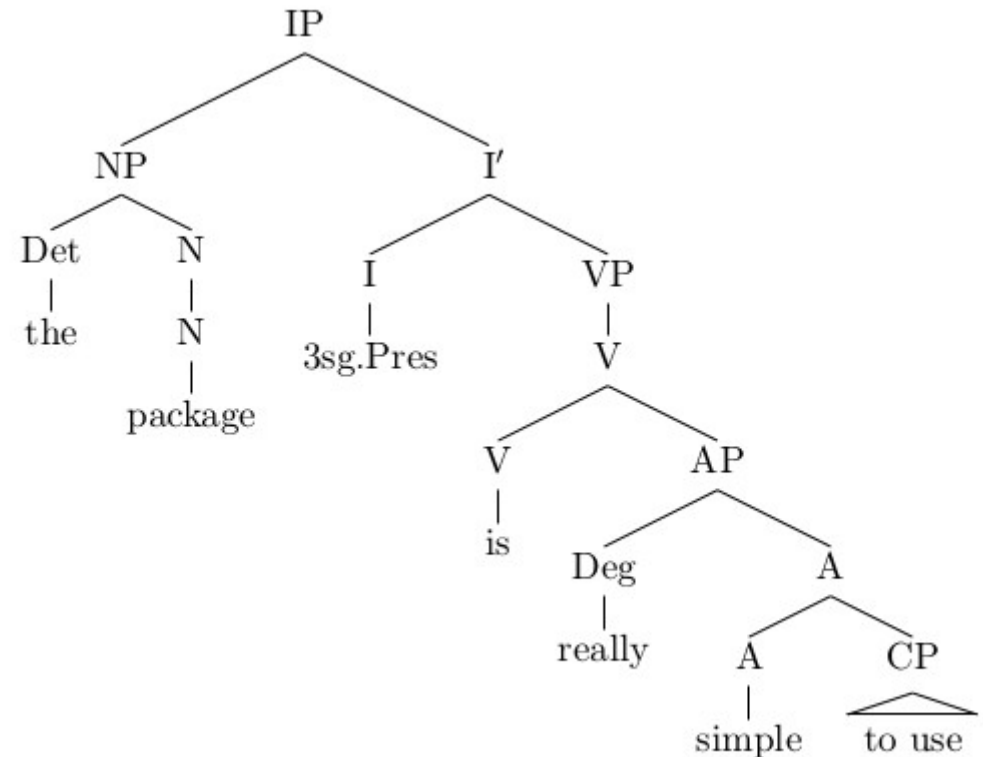
```
\documentclass{article}
```

```
\usepackage{qtree}
```

```
\begin{document}
```

```
\Tree[.IP [.NP [.Det {the} ]  
  [.N [.N {package} ]]]  
  [.I\1 [.I {3sg.Pres} ]  
  [.VP [.V [.V {is} ]  
    [.AP [.Deg {really} ]  
    [.A [.A {simple} ]  
    \qroof{{to use}}.CP ]]]]]]
```

```
\end{document}
```



<https://tex.stackexchange.com/questions/5447/how-can-i-draw-simple-trees-in-latex>

Using qtree (2)

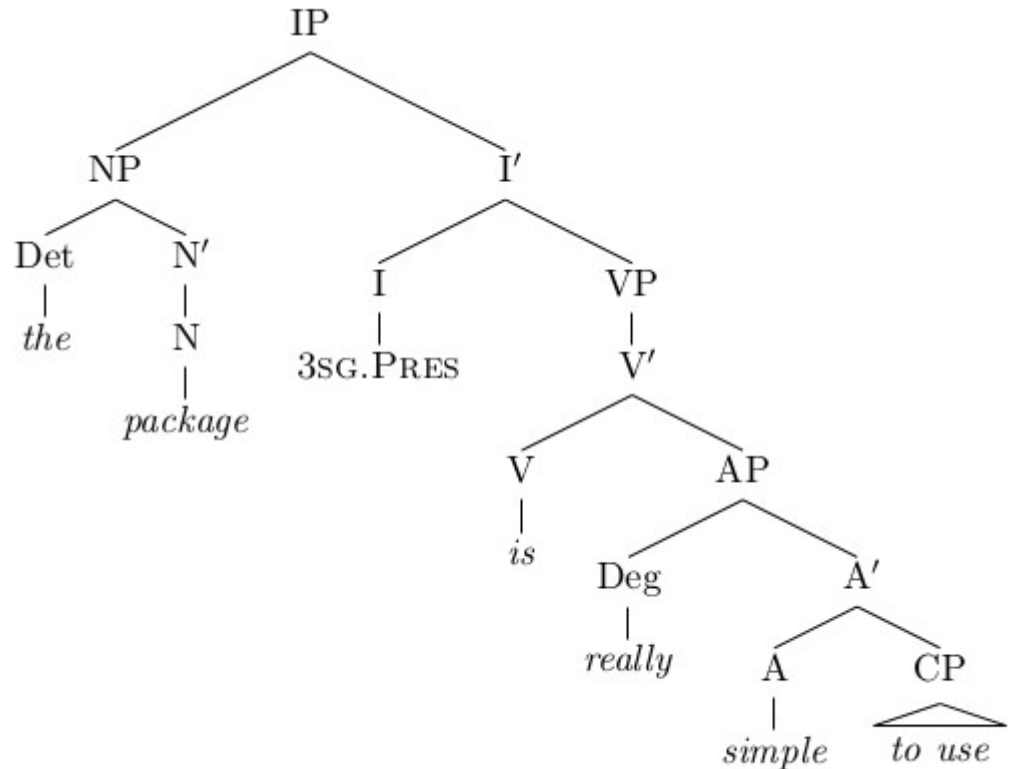
```
\documentclass{article}
```

```
\usepackage{qtree}
```

```
\begin{document}
```

```
\Tree[.IP [.NP [.Det \textit{the} ]  
  [.N\1 [.N \textit{package} ]]]  
  [.I\1 [.I \textsc{3sg.Pres} ]  
  [.VP [.V\1 [.V \textit{is} ]  
    [.AP [.Deg \textit{really} ]  
      [.A\1 [.A \textit{simple} ]  
        \qroof{\textit{to use}}].]    ]]]]
```

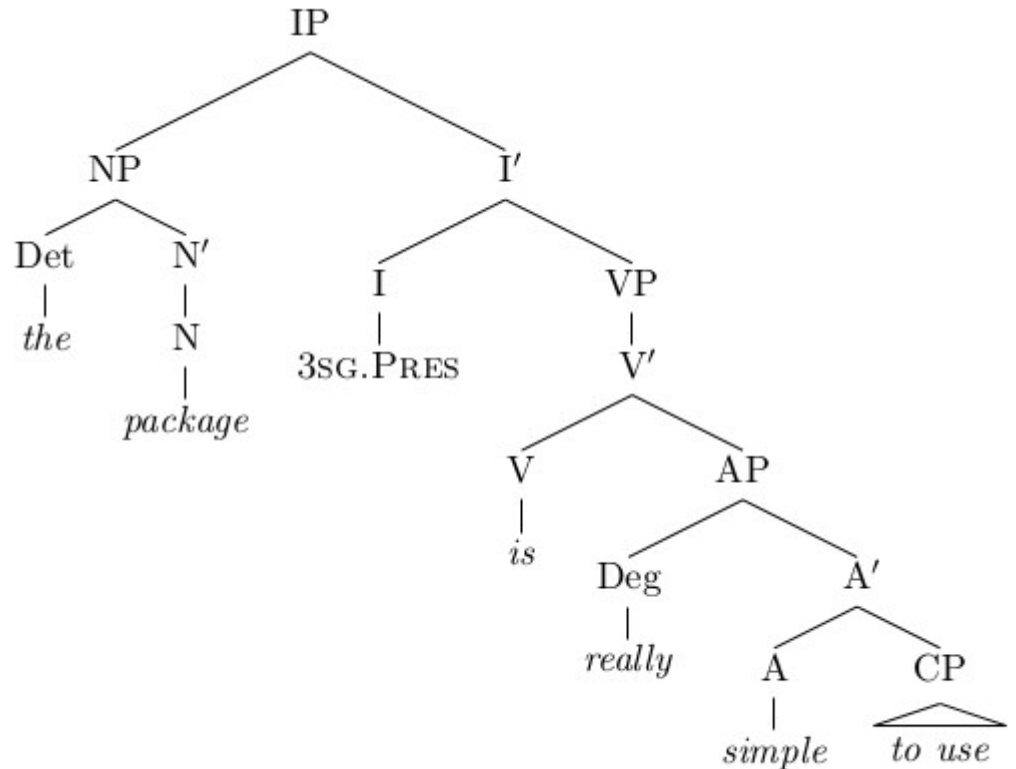
```
\end{document}
```



<https://stackoverflow.com/questions/2985507/how-to-draw-a-graph-in-latex>

Using forest (1)

```
\documentclass[tikz,border=10pt]{standalone}
\usepackage[linguistics]{forest}
\begin{document}
\begin{forest}
for tree={
if n children=0{
font=\itshape
}},
}
[IP
[NP
[Det
[the]
]
[N'$
[N
[package]
]
]
]
]
[I'$
[I
[3sg.Pres, font=\scshape]
]
]
]
]
[V'$
[V
[is]
]
]
[AP
[Deg
[really]
]
]
[A'$
[A
[simple]
]
]
[CP
[to use]
]
]
]
]
]
```



<https://tex.stackexchange.com/questions/5447/how-can-i-draw-simple-trees-in-latex>

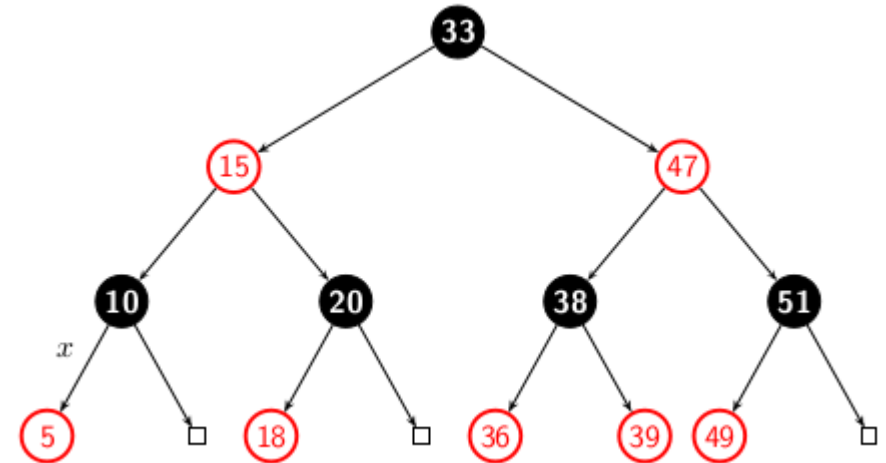
Using preview (1)

```
\usepackage[active,tightpage]{preview}
\PreviewEnvironment{tikzpicture}
\setlength{\PreviewBorder}{10pt}%
%%>
\begin{comment}
:Title: Red-black tree
:Tags: Trees;Graphs
:Author: Madit
:Slug: red-black-tree
```

A red-black tree is a special type of binary tree, used in to organize pieces of comparable data, such as text fra (Wikipedia)

```
\end{comment}
\usetikzlibrary{arrows}
```

```
\tikzset{
  treenode/.style = {align=center, inner sep=0pt, text centered,
    font=\sffamily},
  arn_n/.style = {treenode, circle, white, font=\sffamily\bfseries, draw=black,
    fill=black, text width=1.5em},% arbre rouge noir, noeud noir
  arn_r/.style = {treenode, circle, red, draw=red,
    text width=1.5em, very thick},% arbre rouge noir, noeud rouge
  arn_x/.style = {treenode, rectangle, draw=black,
    minimum width=0.5em, minimum height=0.5em}% arbre rouge noir, nil
}
```



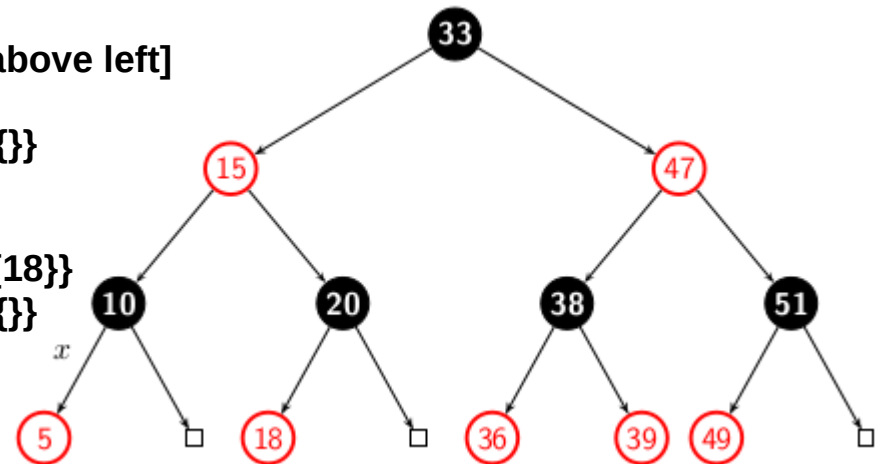
<http://www.texample.net/tikz/examples/feature/trees/>

Using preview (2)

```

\begin{document}
\begin{tikzpicture}[->,>=stealth',level/.style={sibling distance = 5cm/#1,
level distance = 1.5cm}]
\node [arn_n] {33}
  child{ node [arn_r] {15}
    child{ node [arn_n] {10}
      child{ node [arn_r] {5} edge from parent node[above left]
        {$x$}} %for a named pointer
      child{ node [arn_x] {}
      }
    }
    child{ node [arn_n] {20}
      }
  }
  child{ node [arn_r] {47}
    child{ node [arn_n] {38}
      }
    child{ node [arn_n] {51}
      }
  }
}
;
\end{tikzpicture}
\end{document}

```



```

child{ node [arn_r] {18}}
child{ node [arn_x] {}
}

```

```

child{ node [arn_r] {36}}
child{ node [arn_r] {39}}

```

<http://www.texample.net/tikz/examples/feature/trees/>

Some Links

- <https://tex.stackexchange.com/questions/5447/how-can-i-draw-simple-trees-in-late>
- <http://www.texample.net/tikz/examples/feature/trees/>
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References

- [1] <http://en.wikipedia.org/>
- [2]