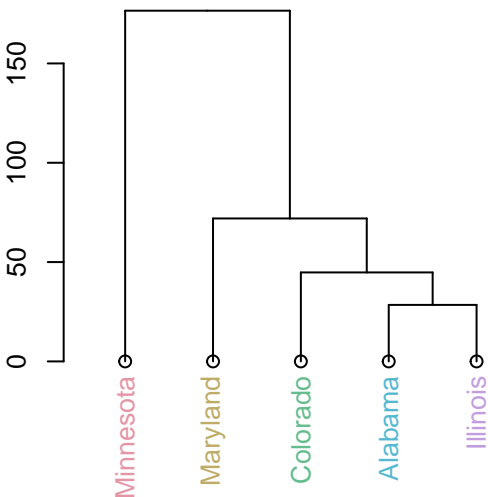


A phylogenetic tree illustrating the genetic relationships between five US states: Minnesota, Maryland, Colorado, Alabama, and Illinois. The tree is rooted at Minnesota. The scale bar indicates genetic distance in substitutions per site, with markers at 0, 50, 100, and 150. The tree shows a series of splits: first, Minnesota branches off; then, Maryland branches off; then, Colorado branches off; then, Alabama branches off; and finally, Illinois branches off.

```

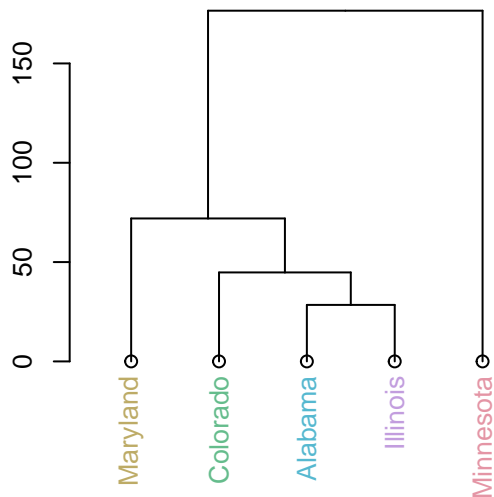
graph LR
    Root --- Minnesota
    Root --- Node1
    Node1 --- Maryland
    Node1 --- Node2
    Node2 --- Colorado
    Node2 --- Node3
    Node3 --- Alabama
    Node3 --- Illinois
  
```



A phylogenetic tree diagram showing the relationships between five states: Maryland, Colorado, Alabama, Illinois, and Minnesota. The tree is rooted on the left with a vertical scale marked at 0, 50, 100, and 150. The branches are colored to match the state names: Maryland (blue), Colorado (orange), Alabama (green), Illinois (red), and Minnesota (purple). The tree structure shows that Maryland and Colorado are sister taxa, with a bootstrap value of 100 at their node. This node is sister to a clade containing Alabama and Illinois, which has a bootstrap value of 70. The node for Alabama and Illinois has a bootstrap value of 100. The entire group of Maryland, Colorado, Alabama, and Illinois is sister to Minnesota, with a bootstrap value of 100 at the base of the tree.

```

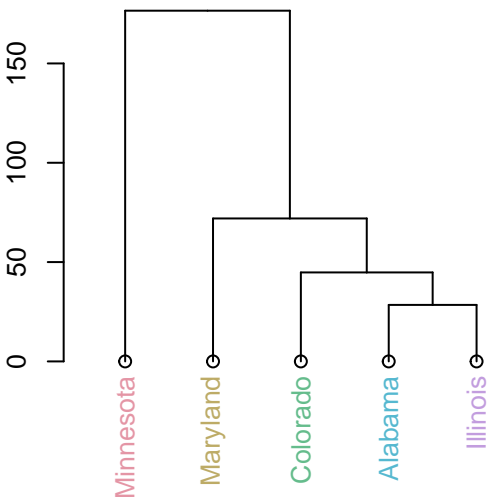
graph LR
    Root --- Node1[100]
    Node1 --- Maryland
    Node1 --- Node2[70]
    Node2 --- Colorado
    Node2 --- Node3[100]
    Node3 --- Alabama
    Node3 --- Illinois
    Node1 --- Minnesota
  
```



A phylogenetic tree illustrating the relationships between five US states: Minnesota, Maryland, Colorado, Alabama, and Illinois. The tree is rooted at Minnesota. The scale bar indicates genetic distance from 0 to 150. The branching order is as follows: Minnesota branches off first, followed by Maryland, then Colorado, then Alabama, and finally Illinois.

```

graph LR
    Root --- Minnesota
    Root --- Node1
    Node1 --- Maryland
    Node1 --- Node2
    Node2 --- Colorado
    Node2 --- Node3
    Node3 --- Alabama
    Node3 --- Illinois
  
```



Phylogenetic tree showing the relationships between five US states: Colorado, Alabama, Illinois, Maryland, and Minnesota. The tree is rooted at the bottom left and branches upwards. The x-axis represents genetic distance with markers at 0, 50, 100, and 150. Colorado (green) and Alabama (blue) are sister taxa, joining at a distance of approximately 45. Illinois (purple) joins this clade at a distance of approximately 75. Maryland (yellow) joins the larger clade at a distance of approximately 125. Minnesota (red) is the outgroup, joining the entire clade at a distance of approximately 165.

