**Backtracking + Forward Chaining – Sample 1**

**A close up of a map

Description automatically generated**

source northwest territories

Assigned color-> Red

source queensland

Assigned color-> Green

source new south wales

Assigned color-> Red

source victoria

Assigned color-> Green

source southern australia

Assigned color-> Blue

source western australia

Assigned color-> Green

source tasmania

Assigned color-> Red

Assigned colors: {'northwest territories': 'Red', 'queensland': 'Green', 'new south wales': 'Red', 'victoria': 'Green', 'southern australia': 'Blue', 'western australia': 'Green', ‘tasmania’: ‘Red’}

Backtrack---> 0

State: tasmania -> Red

State: western australia -> Green

Assigned color to Neighbour: Blue

Assigned color to Neighbour: Red

State: northwest territories -> Red

Assigned color to Neighbour: Green

Assigned color to Neighbour: Blue

Assigned color to Neighbour: Green

State: southern australia -> Blue

Assigned color to Neighbour: Green

Assigned color to Neighbour: Red

Assigned color to Neighbour: Green

Assigned color to Neighbour: Red

Assigned color to Neighbour: Green

State: queensland -> Green

Assigned color to Neighbour: Red

Assigned color to Neighbour: Blue

Assigned color to Neighbour: Red

State: new south wales -> Red

Assigned color to Neighbour: Green

Assigned color to Neighbour: Green

Assigned color to Neighbour: Blue

State: victoria -> Green

Assigned color to Neighbour: Red

Assigned color to Neighbour: Blue

Time taken: 0.0025048255920410156