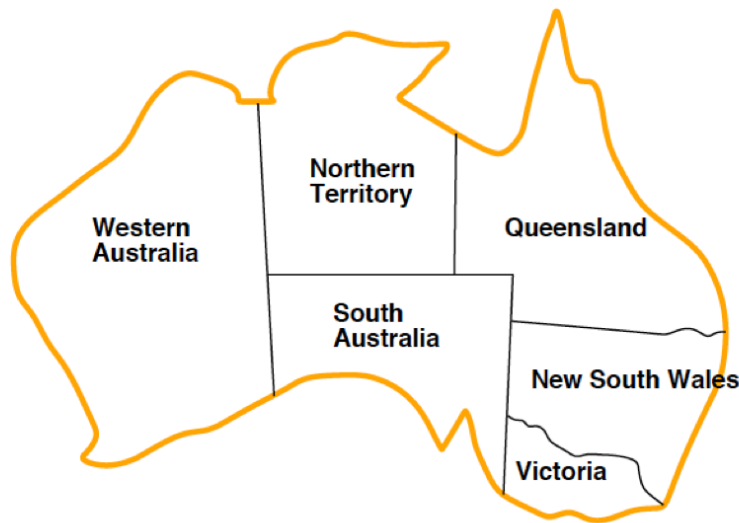


Map coloring

Monday, September 26, 2016 9:49 AM



Green
Red
Blue

Variables: $\{WA, NT, Q, NSW, V, SA, T\}$ Tasmania

Domains: $D_i = \{R, G, B\}$ for all X_i

Constraints: "Adjacent territories have different colors"

$(WA, NT) = \{R, G\}, \{R, B\}, \{B, G\}, \{B, R\}, \{R, G\}, \{R, B\}$
 $(NT, Q) = \{$

Macros: \neq

$WA \neq NT$
 $NT \neq Q$

> ~~write~~ write a parser
 & a language

• Constraint Graph - visualization strategy

- Nodes: variables & constraints
- Arcs: link variables to constraints





Binary Constraints: 2 variables

unary constraints: $Q = \{R\}$

High-order constraints: $(T=SA \text{ or } T=V)$

