Homework

Example 1

B=blue

G=Green

R=Red

Initial Domains

WA	NT	Q	NSW	V	SA	T
B G R	B G R	B G R	B G R	B G R	B G R	B G R

After NT= Blue

WA	NT	Q	NSW	V	SA	T
G R	B	G R	B G R	B G R	B G R	B G R

After NSW=Green

WA	NT	Q	NSW	V	SA	T
G R	B	R	G	B R	R	B G R

After SA=Red

WA	NT	Q	NSW	V	SA	T
G	B		G	B	B	G R

Example 2

Are Consistency of a CSP:

Variable	Constraints	Constrains
WA = {B}	SA≠WA	WA≠SA
NT= {B, G, R}	SA≠NT	NT≠SA
Q= {B, G, R}	SA≠Q	Q≠SA
NSW= {B, G, R}	SA≠NSW	NSW≠SA
V = {B, G, R}	SA≠V	V≠SA
SA= {B, G, R}	WA≠NT	NT≠WA
T= {B, G, R}	NT≠Q	Q≠NT
	Q≠NSW	NSW≠Q
	NSW≠V	V≠NSW

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WA = {B}	SA≠WA	WA≠SA
NT= {B, G, R}	SA≠NT	NT≠SA
Q= {B, G, R}	SA≠Q	Q≠SA
NSW= {B, G, R}	SA≠NSW	NSW≠SA
V = {B, G, R}	SA≠V	V≠SA
SA= { G, R}	WA≠NT	NT≠WA
T= {B, G, R}	NT≠Q	Q≠NT
	Q≠NSW	NSW≠Q
	NSW≠V	V≠NSW

Variable	Constraints	Constrains
WA = {B}	SA≠WA	WA≠SA
NT= {B, G, R}	SA≠NT	NT≠SA
Q= {B, G, R}	SA≠Q	Q≠SA
NSW= {B, G, R}	SA≠NSW	NSW≠SA
V = {B, G, R}	SA≠V	V≠SA
SA= { G, R}	WA≠NT	NT≠WA
T= {B, G, R}	NT≠Q	Q≠NT
	Q≠NSW	NSW≠Q
	NSW≠V	V≠NSW

Variable	Constraints	Constrains
WA = {B}	SA≠WA	WA≠SA
NT= {B, G, R}	SA≠NT	NT≠SA
Q= {B, G, R}	SA≠Q	Q≠SA
NSW= {B, G, R}	SA≠NSW	NSW≠SA
V = {B, G, R}	SA≠V	V≠SA
SA= {G, R}	WA≠NT	NT≠WA
T= {B, G, R}	NT≠Q	Q≠NT
	Q≠NSW	NSW≠Q
	NSW≠V	V≠NSW