

## Constraint Satisfaction Homework

Statement	House	1	2	3	4	5
There are five houses.	House Color					
	Nationality					
	Pet					
	Drink					
	Sport					
The American lives in the first house.	House	1	2	3	4	5
Tea is drunk in the third house.	House Color					
	Nationality	American				
	Pet					
	Drink		Tea			
	Sport					
The American lives next to the White house	House	1	2	3	4	5
	House Color		White			
	Nationality	American				
	Pet					
	Drink		Tea			
	Sport					
The green house is immediately to the right of the yellow house.	House	1	2	3	4	5
	House Color		White	Yellow	Green	
	Nationality	American				
	Pet					
	Drink		Tea			
	Sport					
Beer is drunk in the green house	House	1	2	3	4	5
	House Color		White	Yellow	Green	
	Nationality	American				
	Pet					
	Drink		Tea	Beer		
	Sport					
The Indian lives in the blue house	House	1	2	3	4	5
	House Color		White	Yellow	Green	Blue
	Nationality	American				Indian
	Pet					
	Drink		Tea	Beer		
	Sport					
Jogging is the preferred sport in the red house	House	1	2	3	4	5
	House Color	Red	White	Yellow	Green	Blue
	Nationality	American				Indian
	Pet					
	Drink		Tea	Beer		
	Sport	Jogging				
The jogger lives next to the owner of a dog.	House	1	2	3	4	5
	House Color	Red	White	Yellow	Green	Blue
	Nationality	American				Indian
	Pet		Dog			
	Drink		Tea	Beer		
	Sport	Jogging				

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The Mexican drinks Horcahta	House	1	2	3	4	5
	House Color	Red	White	Yellow	Green	Blue
	Nationality	American	Mexican			Indian
	Pet		Dog			
	Drink		Horchata	Tea	Beer	
	Sport	Jogging				
The Polo player drinks milk.	House	1	2	3	4	5
	House Color	Red	White	Yellow	Green	Blue
	Nationality	American	Mexican			Indian
	Pet		Dog			
	Drink		Horchata	Tea	Beer	Milk
	Sport	Jogging				Polo Player
The German likes soccer.	House	1	2	3	4	5
	House Color	Red	White	Yellow	Green	Blue
	Nationality	American	Mexican		German	Indian
	Pet		Dog			
	Drink		Horchata	Tea	Beer	Milk
	Sport	Jogging			Soccer	Polo Player
The Pakistani owns the parrot.	House	1	2	3	4	5
	House Color	Red	White	Yellow	Green	Blue
	Nationality	American	Mexican	Pakistani	German	Indian
	Pet		Dog	Parrot		
	Drink		Horchata	Tea	Beer	Milk
	Sport	Jogging			Soccer	Polo Player
The cricket player owns a monkey .	House	1	2	3	4	5
No constraint possible => backtrack	House Color	Red	White	Yellow	Green	Blue
	Nationality	American	Mexican	Pakistani	German	Indian
	Pet		Dog	Parrot		
	Drink		Horchata	Tea	Beer	Milk
	Sport	Jogging			Soccer	Polo Player
The green house is immediately to the right of the yellow house.	House	1	2	3	4	5
	House Color		White		Yellow	Green
	Nationality	American				
	Pet					
	Drink			Tea		
	Sport					
The Indian lives in the blue house	House	1	2	3	4	5
	House Color		White	Blue	Yellow	Green
	Nationality	American		Indian		
	Pet					
	Drink			Tea		
	Sport					
Jogging is the preferred sport in the red house	House	1	2	3	4	5
	House Color	Red	White	Blue	Yellow	Green
	Nationality	American		Indian		
	Pet					
	Drink			Tea		
	Sport	Jogging				
The jogger lives next to the owner of a dog.	House	1	2	3	4	5
	House Color	Red	White	Blue	Yellow	Green
	Nationality	American		Indian		
	Pet		Dog			
	Drink			Tea		
	Sport	Jogging				

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The cricket player owns a monkey	House	1	2	3	4	5
	House Color	Red	White	Blue	Yellow	Green
	Nationality	American		Indian		
	Pet		Dog	Monkey		
	Drink			Tea		
	Sport	Jogging		Cricket		
The person with a racoon lives next to the swimmer.	House	1	2	3	4	5
	House Color	Red	White	Blue	Yellow	Green
	Nationality	American		Indian		
	Pet	Racoon	Dog	Monkey		
	Drink			Tea		
	Sport	Jogging	Swimmer	Cricket		
The Mexican drinks Horchahta.	House	1	2	3	4	5
	House Color	Red	White	Blue	Yellow	Green
	Nationality	American	Mexican	Indian		
	Pet	Racoon	Dog	Monkey		
	Drink		Horchata	Tea		
	Sport	Jogging	Swimmer	Cricket		
The Pakistani owns the parrot.	House	1	2	3	4	5
	House Color	Red	White	Blue	Yellow	Green
	Nationality	American	Mexican	Indian	Pakistani	
	Pet	Racoon	Dog	Monkey	Parrot	
	Drink		Horchata	Tea		
The German likes soccer. Beer is drunk in the green house	House	1	2	3	4	5
	House Color	Red	White	Blue	Yellow	Green
	Nationality	American	Mexican	Indian	Pakistani	German
	Pet	Racoon	Dog	Monkey	Parrot	
	Drink		Horchata	Tea		Beer
	Sport	Jogging	Swimmer	Cricket		Soccer
The Polo player drinks milk	House	1	2	3	4	5
	House Color	Red	White	Blue	Yellow	Green
	Nationality	American	Mexican	Indian	Pakistani	German
	Pet	Racoon	Dog	Monkey	Parrot	
	Drink		Horchata	Tea	Polo	Beer
	Sport	Jogging	Swimmer	Cricket	Milk	Soccer
Now, who drinks water? Who owns the fish?	House	1	2	3	4	5
	House Color	Red	White	Blue	Yellow	Green
	Nationality	American	Mexican	Indian	Pakistani	German
	Pet	Racoon	Dog	Monkey	Parrot	Fish
	Drink	Water	Horchata	Tea	Milk	Beer
	Sport	Jogging	Swimmer	Cricket	Polo	Soccer