

CS 335: Constraint Satisfaction Problems

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1 TASK

- There are five houses.
- The Indian lives in the blue house.
- The Pakistani owns the parrot.
- Beer is drunk in the green house.
- The Mexican drinks Horcahta.
- The green house is immediately to the right of the yellow house.
- The cricket player owns a monkey.
- Jogging is the preferred sport in the red house.
- Tea is drunk in the third house.
- The American lives in the first house.
- The person with a racoon lives next to the swimmer.
- The jogger lives next to the owner of a dog.
- The Polo player drinks milk.
- The German likes soccer.
- The American lives next to the White house
- Now, who drinks water? Who owns the fish?
- In the interest of clarity, it must be added that each of the five houses is painted a different color, and their inhabitants are of different national extractions, own different pets, drink different beverages and practice different sports. One other thing: in statement 6, “right” means your right.

2 MUST HAVE

Your work must comply with the following:

- Done in a computer, not by hand. (10pts)
- Respect all conventions for states. (10pts)
- Clearly state variables, domains and constraints.(20pts)
- Trace the backtracking algorithm seen in class. You are allowed to make “good guesses.” (20pts)
- Select next attribute using MRV (20pts)
- Show your work **step by step** on a table (10pts)
- Clearly mark the solution (10pts)

Not complying with these will result in discounts.

3 SUBMIT

ONE PDF (not Word (docx), Pages, Libre Office, text, etc.) with all of your answers. If you are working on Word, to make a PDF you should select “Save As” from the “File” menu and select PDF on the filetype drop down box.