Sheet 4
CSP

1. Consider the following logic puzzle:
   In five houses, each with a different color, live 5 persons of different nationalities, each of whom prefer a different brand of cigarette, a different drink, and a different pet. Given the following facts, the question to answer is Where does the zebra live, and in which house do they drink water?

   (a) The Englishman lives in the red house.

   (b) The Spaniard owns the dog.

   (c) The Norwegian lives in the first house on the left.

   (d) Kools are smoked in the yellow house.

   (e) The man who smokes Chester elds lives in the house next to the man with the fox.

   (f) The Norwegian lives next to the blue house.

   (g) The Winston smoker owns snails.

   (h) The Lucky Strike smoker drinks orange juice.

   (i) The Ukrainian drinks tea.

   (j) The Japanese smokes Parliaments.

   (k) Kools are smoked in the house next to the house where the horse is kept.

   (l) Coffee is drunk in the green house.

   (m) The Green house is immediately to the right (your right) of the ivory house.

   (n) Milk is drunk in the middle house.

   Discuss different representations of this problem as a CSP. Why would one prefer one representation over another?
   Then answer the required question applying the constraints.

   Good Luck