Assignment 4

Benjamin Sorenson

November 16, 2015

1 Chapter 6 Logical Agents

1.1 Definitions

assignment each state in a CSP is defined by an assignment of values to some or all of the variables

consistent (assignment) An assignment that does not violate any constarints

complete assignment every variableis assinged

solution a consistent complete assignment

partial assignment only some of the values are assinged

constraint graph node scorresopond to variables, and a alink connects any two varibale that participate in a constraint

precedence constraint Whenever a task t_1 must occur before task T_2, an dT_1 takes duration d_1 to complete, we add an arithmetic constrain of the form $T_1 + d_1 \leq T_2$

disjunctive constraint requirement that two or more tasks must not occur at the same time

discrete, finite domain simplest kind of constrain satisfaction problem (map-coloring, scheduling, 8-queens)

infinite, discrete domain not possible to describe constraints by enumerating all allowed conbinations of values

constraint language language that understands, and can evaluate constraints directly without enumerating sets of allowable value

linear constraints constraints in which each variable appears in linear form (e.g. $T_1 + d_1 \leq T_2$)