

ASSIGNMENT 4

1. Variables in this problem:-

In this problem, the variables are Sparkman, Snarkman, Needleman, Hardman, Topman, Geminiman, Magnetman, Shadowman, Bubbleman, Airman, Quickman, Heatman, Crashman, Metalman, Flashman, Woodman. Here the exam taken by a student would be the variable and the variables listed above are the variable for term1.txt

2. Domains of each variable:-

The domain of each variable for the term1.txt would be the sets of days that the exam can be scheduled for. So, we can assign any integer value from 1 to the number of days in the exam schedule as the value of a variable. So, for this problem for the term1.txt the variable will be 3, because that's the number of days in the exam period. So for this problem the domain would be three (3) and it can be represented as $[1, 2, 3]$ because that's the number of days in the exam period.

3. Example of assigning a value to a variable:-

an example would be assigning the value 2 to the variable Sparkman. And this would mean that the exam for Sparkman has been scheduled for the 2nd day of the exam schedule.

(4) Constraints in this problem:-

The constraint here is that no two exam can be scheduled on the same day for the robot student. And it can be represented as this:-

(Sparkman, Snakeman), (Sparkman, Needleman), (Sparkman, Hardman), (Sparkman, Topman), (Sparkman, Geminiman), (Sparkman, Magnetman), (Sparkman, Shadowman), (Snakeman, Needleman), (Snakeman, Hardman), (Snakeman, Topman), (Snakeman, Geminiman), (Snakeman, Magnetman), (Snakeman, Shadowman), (Needleman, Hardman), (Needleman, Topman), (Needleman, Geminiman), (Needleman, Magnetman), (Needleman, Shadowman), (Hardman, Topman), (Hardman, Geminiman), (Hardman, Magnetman), (Hardman, Shadowman), (Topman, Geminiman), (Topman, Magnetman), (Topman, Shadowman), (Geminiman, Magnetman), (Geminiman, Shadowman), (Magnetman, Shadowman)