CSD311-AI

Assignment 4 (Marks <15>):

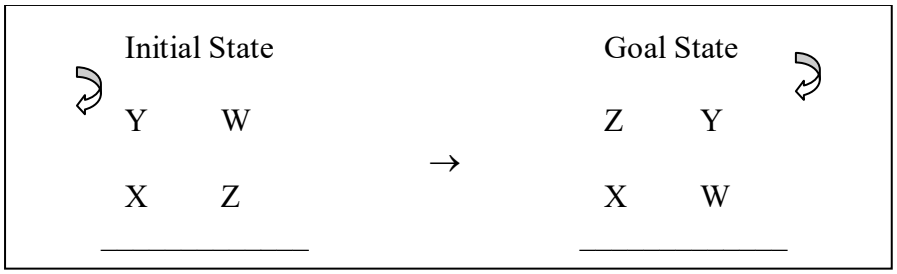
- Group of 3 students from the same lab group.
- Posting Date: <26th Oct 2021>;
- Due date of submission <11th Nov 2021>;
- Demos will be held in the respective lab timings on 12th and 13th respectively. TA will announce demo Schedule during Lab timings on <11th Nov 2021>
- Serious penalty for plagiarism and cheating.
- No late submission will be allowed.

Develop program in Prolog/C/C++/Java/python for **planner(Start, Goal, Plan)** using **Goal stack** technique generating plans for block world problem discussed in the class. Marks corresponding to each component are shown along with it.

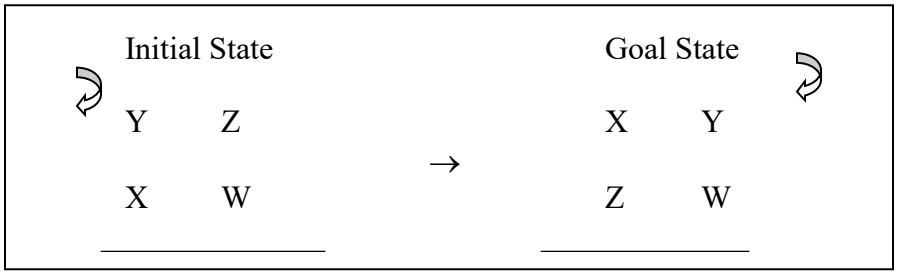
- Use appropriate representations for representing Start and Goal states of Block world problem and display. (1)
- Proper Documentation. All algorithms used should in a doc file and put comments explaining each module in the program. (2)
- Display status of state change after each operation. (2)
- File containing output of given test data. (2)
- Execution of planner on random test data by TA (5)
- Demo explaining questions asked by TA. (2)
- Good display of output (1)

Test configurations:

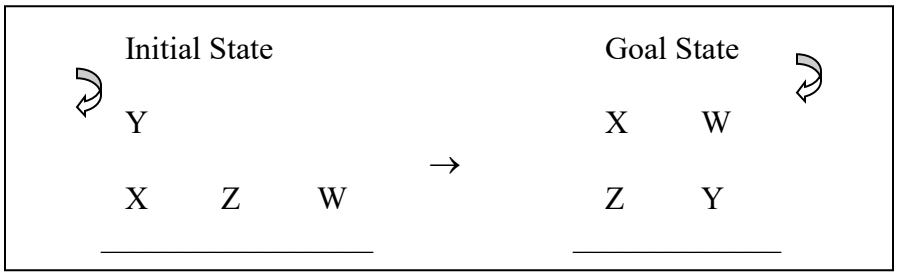
i.



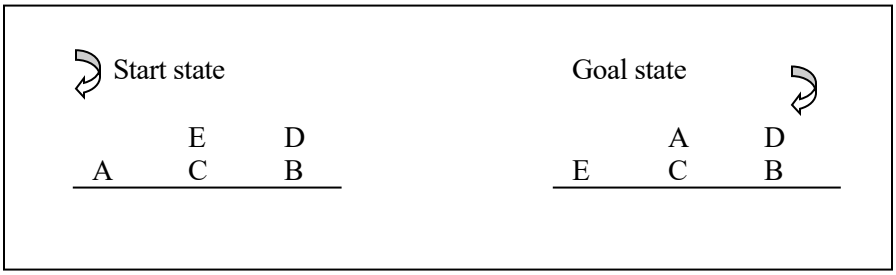
ii.



iii.


Initial State
Goal State
Y
X W
X Z W
Z Y

iv.


Start state
Goal state
E D
A C B
A D
E C B