

CSD311 - AI

Assignment 3 [Total marks 15] (To be done in group of 2)

Posting Date: 15/ Oct/ 2021

Submission dates:

- Early Submission: 21/Oct/2021 with execution of the programs for min 3 test data.
- Late submission: 25/Oct/2021 with evaluation to be done out of 12 marks.

Note:

1. Plagiarism zero tolerance. If found code copied, -15 will be awarded.
2. Evaluation in the respective Lab class 22nd and 23th Oct.
3. Link will be provided for submitting the group name by 18th Oct.

Write Prolog Programs for the following problems and submit programs with run of each for 2-3 test data

- To check if a list L is prefix or suffix of M i.e., [2,3] is prefix and [3,5,6] is suffix of [2,3,5,6] (3+3)
- Define binary tree data structures in Prolog and write prolog programs for the following
 - Insert a node in the binary search tree. (2)
 - Create binary search tree (Values on left sub tree of a node are less and in right sub tree are greater than the value in the node) using insert. (3)
 - Create a mirror image of the binary tree. Swap nodes at each level. (4)