Discrete mathematics - Chapter Trees practical work

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ATTENTIONS

- Practical work duration: *14:00 - 16:30.*

- Remember to send your work to my email address *giang-anh.tuan@usth.edu.vn* with this email title format *"[ICT Bx] - Chapter Trees practical work - your name"* before *23:59* (x is your enrollment academic year, i.e ICT B6, incorrect format or late submission will not be considered).

Computer Projects: write programs with these inputs and outputs.

1 PROBLEM 1

Given the adjacency matrix of an undirected simple graph, determine whether the graph is a tree.

2 PROBLEM 2

Given a list of items, construct a binary search tree containing these items.

3 PROBLEM 3

Given an arithmetic expression in postfix form, find its value.

4 PROBLEM 4

Given the adjacency matrix of a connected undirected simple graph, find a spanning tree for this graph using depth-first search.

5 PROBLEM 5

Given a set of positive integers and a positive integer N, use backtracking to find a subset of these integers that have N as their sum.