

# CS1023 Lab Mar 22-24

## Data structures: binary search tree

### Requirements

Complete as many of the following as you have time for.

1. Download lab-mar-22.c from Blackboard.
2. Create a binary search tree to store the names of 8 programming languages
3. Provide the implementation code for PreOrderWalk
4. Provide the implementation code for PostOrderWalk
5. Display the contents of your tree using
  - (a) InOrder traversal
  - (b) PreOrder traversal
  - (c) PostOrder traversal
6. Free the memory used by your tree.
7. Using lab-mar-22.c as a template, create an application to build a binary search tree for integers.
8. Insert 20 random integers in your tree
9. Display your tree using InOrder traversal.

### To be handed in:

1. Copy and paste your source code for this lab into the submission box on Blackboard.
2. Ensure that your name and student number are included in the comments