

EECE.3220 Fall 2019: Exam 3

Class Definitions

BST class definition for Question 2b

```
class BST {
public:
    BST(); // Default constructor
    void print(ostream &os); // Print tree contents to os

    // Space to add additional functions
    // that aren't necessary for this exam

private:
    class BNode {
    public:
        int data; // Data stored in node
        BNode *left; // Left subtree
        BNode *right; // Right subtree
    };

    BNode *root; // Root of tree

    // Helper function for printing tree contents
    // Will write definition in Question 2b
    void printtree(ostream &os, BNode *st);
};
```

Heap class definition for Question 3b

```
class Heap {
public:
    Heap(); // Default constructor
    unsigned countNonLeaves(); // Counts non-leaf nodes
    // Will write definition
    // in Question 3b

    // Space to add additional functions
    // that aren't necessary for this exam

private:
    int heaparr[1024]; // Actual heap data storage
    unsigned size; // Number of values stored in heap
};
```