I & C SCI 46 Winter 2023
Lecture 11: Introduction to Binary Search Trees
Warm-Up

Insert into an initially empty BST: 50, 25, 75, 60, 55, 90, 65, 37
Delete 62
Delete 17
Delete 78
Print Keys in order

Write a function:

▶ Print each key
▶ Print smallest to largest

```
inOrder(Node *r)
if (r == nullptr)
    return;
out r->key
inOrder(r->left)
inOrder(r->right)
```
Recreate the Tree

Write a function:

- Print each key
- Allow me to recreate the tree

```c
pre-order (Node * r)
if (nullptr == r) return;
output r
pre-order (r->left)
pre-order (r->right)
```
Syntax Trees

Binary, not search \(((x + y)^2) + ((x - 4)/3)\).
Draw this tree

- Every non-null node is one character