

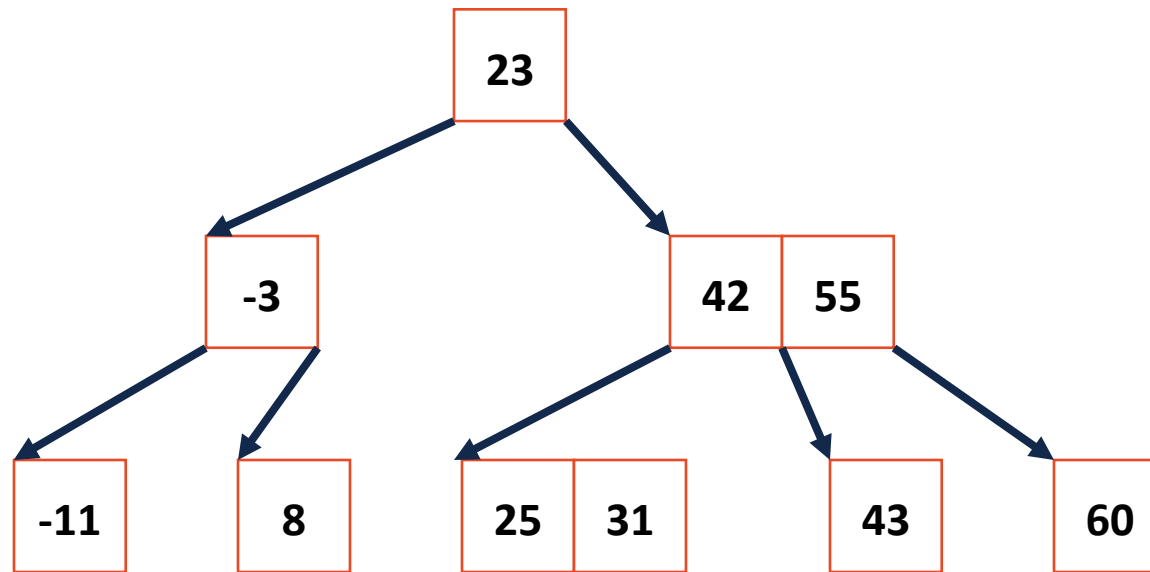


CS 400

B-Tree Search

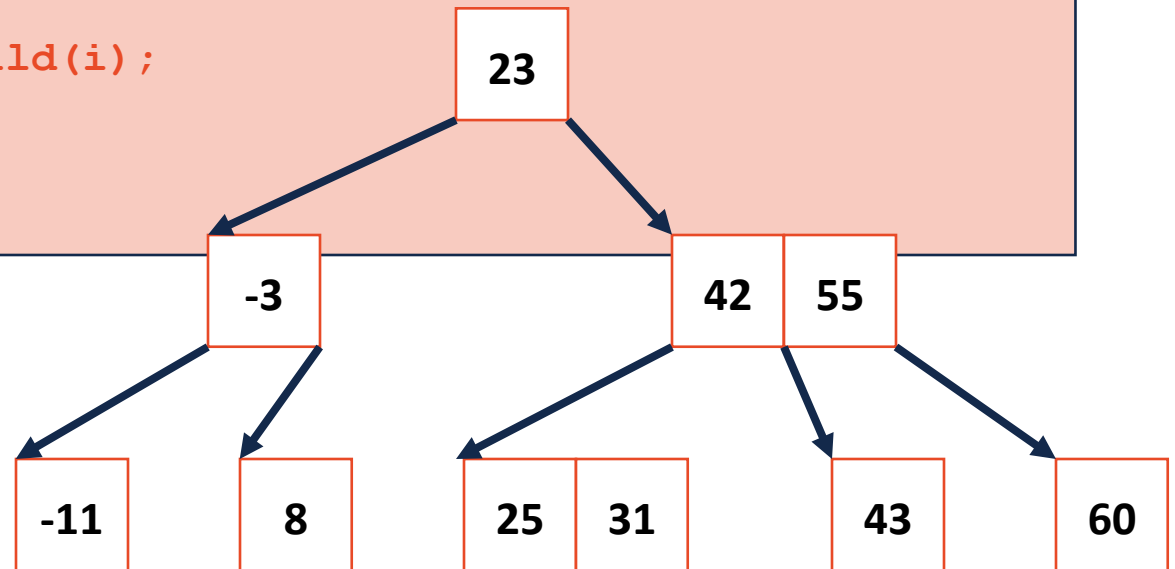
ID: 08-03

BTree Search



BTree Search

```
1 bool Btree::_exists(BTreeNode & node, const K & key) {
2
3     unsigned i;
4     for ( i = 0; i < node.keys_ct_ && key < node.keys_[i]; i++) { }
5
6     if ( i < node.keys_ct_ && key == node.keys_[i] ) {
7         return true;
8     }
9
10    if ( node.isLeaf() ) {
11        return false;
12    } else {
13        BTreeNode nextChild = node._fetchChild(i);
14        return _exists(nextChild, key);
15    }
16 }
```



BTree Analysis

The height of the BTree determines maximum number of _____ possible in search data.

...and the height of the structure is: _____.

Therefore: The number of seeks is no more than _____.