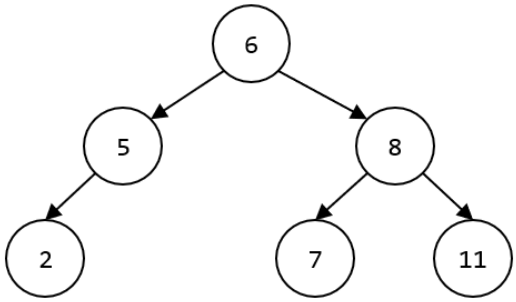
VA: Name _____ Andrew ID _____

## Quizlet 7

Run **linear search** and **binary search** on each of the following BSTs to find the **number 12**. List the nodes that will be visited.

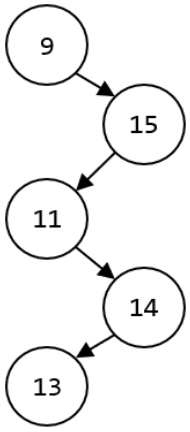



Nodes visited by Linear Search:

**6, 5, 2, 8, 7, 11**

Nodes visited by Binary Search:

**6, 8, 11**

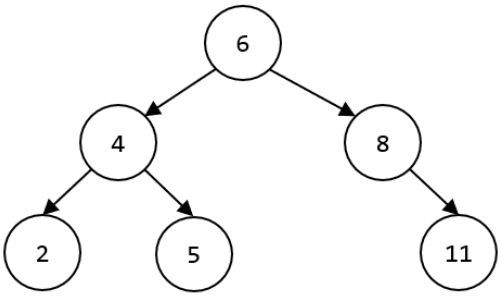



Nodes visited by Linear Search:

**9, 15, 11, 14, 13**

Nodes visited by Binary Search:

**9, 15, 11, 14, 13**




For the tree on the left, we want to sum all the nodes of the tree with a leaf base case:

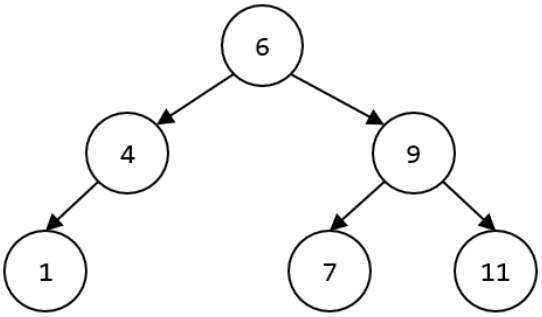
How many **total steps** will occur if you **do not** use concurrency? _____**6**_____

How many **time steps** will occur if you run the sum algorithm on different cores using concurrency? _____**3**_____

VB: Name _____ Andrew ID _____

## Quizlet 7

Run **linear search** and **binary search** on each of the following BSTs to find the **number 12**. List the nodes that will be visited.

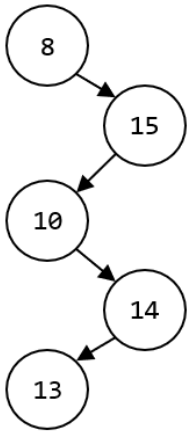



Nodes visited by Linear Search:

**6, 4, 1, 9, 7, 11**

Nodes visited by Binary Search:

**6, 9, 11**

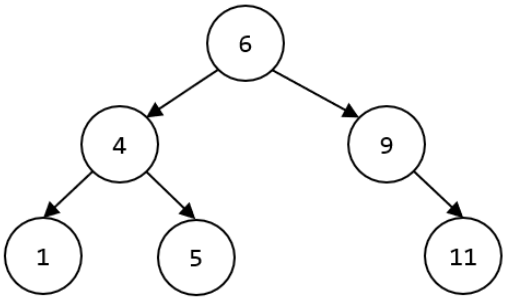



Nodes visited by Linear Search:

**8, 15, 10, 14, 13**

Nodes visited by Binary Search:

**8, 15, 10, 14, 13**




For the tree on the left, we want to sum all the nodes of the tree with a leaf base case:

How many **total steps** will occur if you **do not** use concurrency? _____**6**_____

How many **time steps** will occur if you run the sum algorithm on different cores using concurrency? ____**3**_____