

January 2024, CSE 106
Online on Binary Search Tree (B1/B2)
Time: 40 Minutes

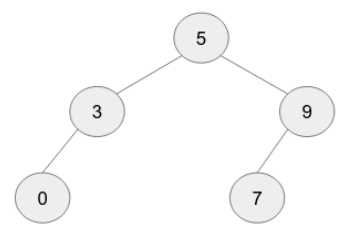
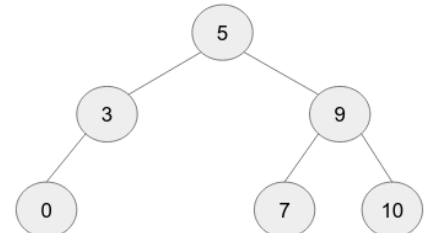
Problem Specification: Implement the following function.

```
int getSecondLargest(Node* node)
```

Here, `node` is the root node of a BST. The function returns the second-largest value found in the sub-tree rooted at `node`.

Input/Output Format: The input-output format is similar to the one described in *Assignment 4: Binary Search Tree*. In addition, the *get-second-largest* query will start with S followed by an integer which will be ignored. A modified `main.cpp` is uploaded to evaluate your solution.

Assuming the tree shown in the figures, the sample inputs and outputs are as follows.

Sample Inputs	Sample Outputs
 <pre>graph TD; 5((5)) --- 3((3)); 5 --- 9((9)); 3 --- 0((0)); 9 --- 7((7));</pre> <p>G 0</p>	7
 <pre>graph TD; 5((5)) --- 3((3)); 5 --- 9((9)); 3 --- 0((0)); 9 --- 7((7)); 9 --- 10((10));</pre> <p>G 0</p>	9

Submission Guidelines: Save your `.cpp` file as `2306<3-digit-Student-ID>.cpp` and upload it on Moodle in the corresponding submission link.