**S.Y. B. Tech. Academic Year 2018-19 Trimester: VI**

**Data Structure-II**

**LABORATORY WRITE UP**

###### Experiment Number: 03

**TITLE: Implementation of Dictionary using Binary Search Tree**

**PROBLEM STATEMENT**:

Implement dictionary using binary search tree where dictionary stores keywords & its meanings. Perform following operations:

* + 1. Insert a keyword
    2. Delete a keyword
    3. Create mirror image and display level wise
    4. Copy

**OBJECTIVE:**

1. To study data structure : Binary Search Tree
2. To study breadth first traversal.
3. To study different operations on Binary search Tree.

**THEORY: *//To be Written by Students***

***// Write theory by elaborating below points***

Write in brief about

* Binary Search Tree
* Breadth First Traversal
* Different operations on binary search tree.(copy ,mirror image and delete)

**IMPLEMENTATION:**

* **PLATFORM:** 
  + 64-bit Open source Linux or its derivatives.
  + Open Source C++ Programming tool like g++/Eclipse Editor.
* **TEST CONDITIONS:-**

1. Input at least 10 nodes.
2. Display binary search tree levelwise traversals of binary search tree with 10 nodes
3. Display mirror image and copy operations on BST

* **PSEUDO CODE: *//To be Written by Students***

Write pseudo code for create, display, delete, mirror image and copy

**TIME COMPLEXITY: *//To be Written by Students***

Find out time complexity of above operations

* **CONCLUSION:**

Thus, implemented Dictionary using Binary search tree.

* **FAQs *//To be Written by Students***

1.Explain application of BST

2.Explain with example deletion of a node having two child.

3.Define skewed binary tree.

* **PRACTICE ASSIGNMENTS**

###### Write a program to check equality of binary search tree.

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