Data Structures, 2016
Lab Assignment #7

1. Create a ***BST (Binary Search Tree)*** of integers. Perform the following operations:
   a) Check whether the given BST is height balanced or not?
   b) Print the balance factor of each node.
   c) Transform the given BST to height balanced (AVL) BST.

   Implement this ADT ***BST*** using the data structure "Linked List" with dynamic memory allocation. Write separate functions for all 4 cases and rotations required to correct the balance factor of an imbalanced node.

2. Create an ADT Undirected Graph G(V,E) and implement the following operations:
   a) Insert a node.
   b) Insert an edge.
   c) Search a node.
   d) Check the adjacency.
   e) Delete an edge.
   f) Delete the node.
   g) Traversal (breadth first and depth first).
   h) Check whether it is connected or not?