

**Department of Computer Science,
Data Structures (CSC212),
Tutorial 9
BST**

Question 1 (BST)

(a) Insert the following Keys in a Binary Search Tree. The tree is initially empty.
flower, cat, ink, ball, elephant, dust, king, mango, hen

Note: {A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P,Q,R,S,T,U,V,W,X,Y,Z}

(b) Remove the following Keys from the Binary Search Tree you made in section a.
dust, ink, flower, cat

(c) Update the following Keys from the Binary Search Tree you made in section b.
(hen → goat), (elephant → light)

Question 2 (BST)

Using a recursive algorithm, add the method *findMaxKey* to the BST ADT implementation. The method returns the maximum key in the BST.

Question 3 (BST)

Using a recursive algorithm, add the method *height* to the BST ADT implementation. The method returns the height of the tree *t*.