1) (80’) Name: ___SOLUTION_____ PID:_____________________

2) Given the binary tree to the right:

   (a) (5’) What’s the print out order of the in-order tree walk?
   
   DBEAC

   (b) (5’) Recall that in a binary search tree (BST), a key is no smaller (greater) than any keys stored in nodes of its left (right) subtree. Tick the ones among the following conditions that are necessary for this tree to be a BST:

   - √ __D<=A; _ √ __E<=A; _ √ __B<=C; _ √ __E<=C; _ __ B!=A

   (it says any key in its subtree, not only children nodes)

   (c) (5’) Assume it is a binary search tree, draw the tree after deleting B.
   (we use the successor, not predecessor)

   (d) (5’) Insert B again into the tree, assuming that D<B<E.
   (Draw the tree after insertion)

   In BST, insertion is very similar to search, and you always end up with a leaf node during insertion!

3) (Bonus 5’) Any suggestion is welcomed and appreciated! (regarding HWs, exams, quizzes, lectures, projects, etc.)