

Washington State University
School of Electrical Engineering and Computer Science
Spring 2022

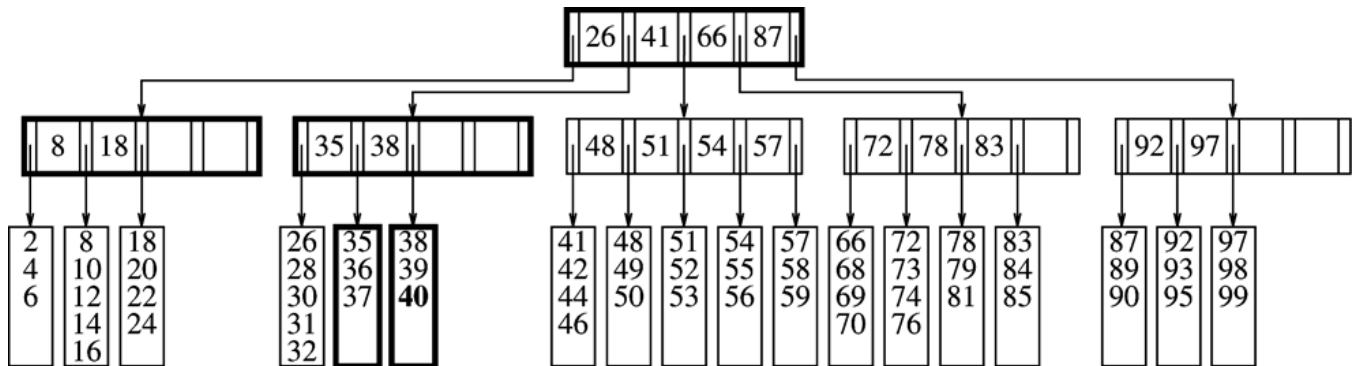
CptS 223 Advanced Data Structures in C++

Homework 6 – Solution

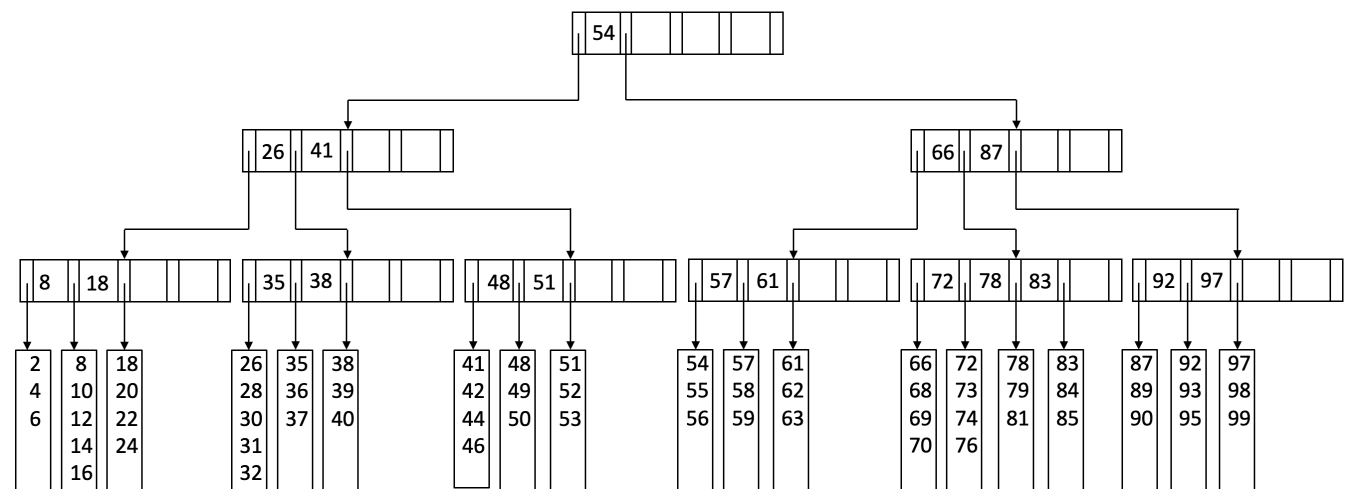
Due: February 23, 2022 (11:59pm pacific time)

General Instructions: For questions 1 and 2, put your solutions in one PDF file. For question 3, create a ZIP file containing your files for this question. Upload the PDF and ZIP files as your submission for Homework 6 for the course CptS 223 Pullman on the Canvas system by the above deadline.

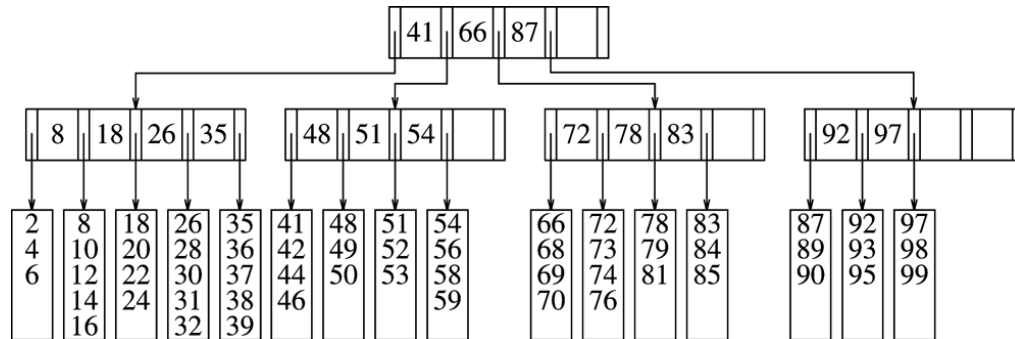
1. Show the final B-tree after inserting 61, 62 and 63 into the following B-tree, where $M=L=5$.



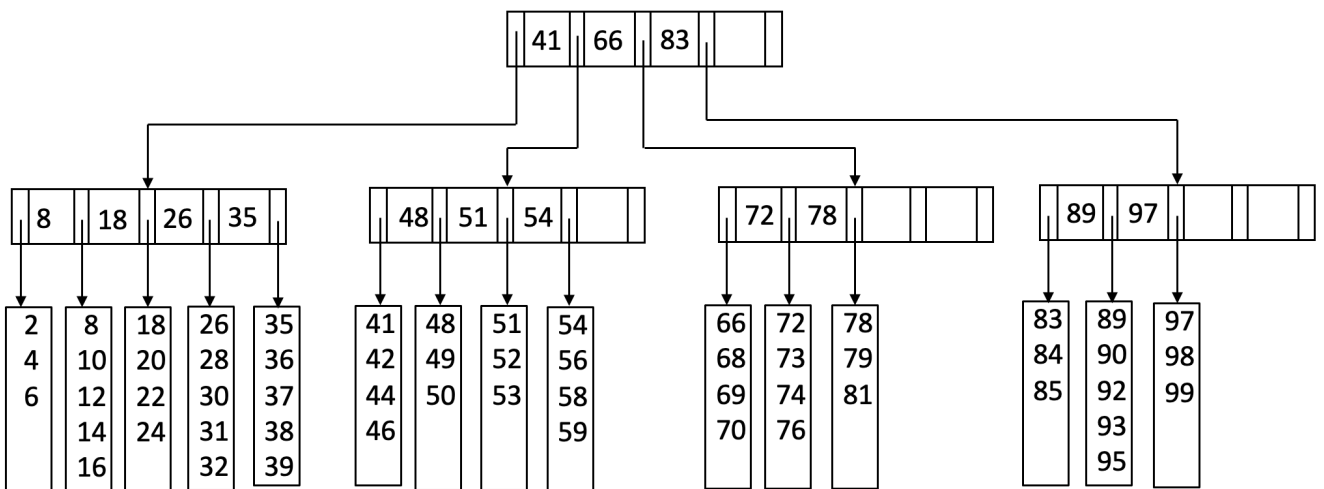
Solution:



2. Show the final B-tree after removing 87 from the following B-tree, where $M=L=5$.



Solution:



3. Implement the BinarySearchTree template class described in the Weiss book (Figures 4.16-4.28, excluding 4.19) and add code for printing tree traversals and the DepthEqual method from HW5.

Solution: See attached BinarySearchTree.h file.