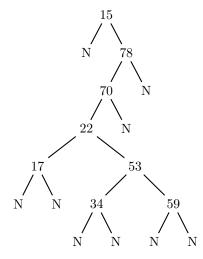
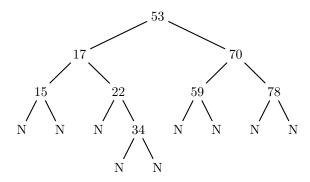
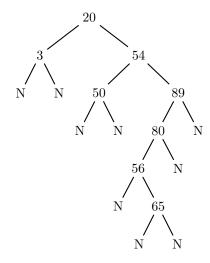
In this document, we'll explore two types of trees: Binary Search Trees (BSTs) and AVL Trees. These trees serve as powerful tools in computer science for storing and managing data. We'll examine real examples of both trees to understand their differences and advantages. By the end, you'll have a clear picture of how these trees work and when to use each one

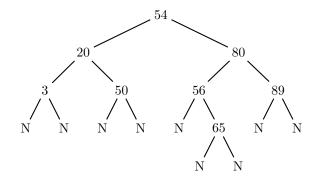
[15, 78, 70, 22, 53, 59, 17, 34] Binary Search Tree



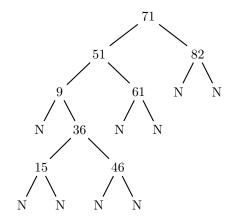


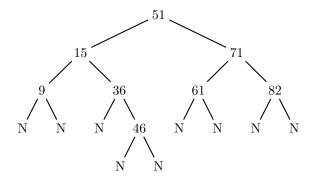
 $[20,\,54,\,3,\,89,\,80,\,50,\,56,\,65]$ Binary Search Tree



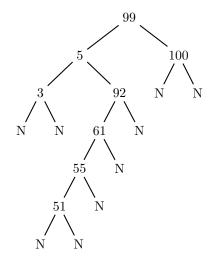


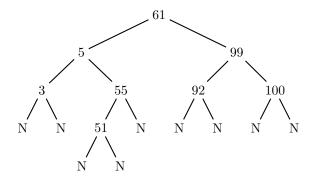
 $[71,\,51,\,9,\,82,\,36,\,61,\,15,\,46]$ Binary Search Tree



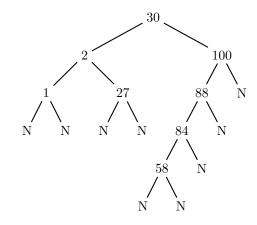


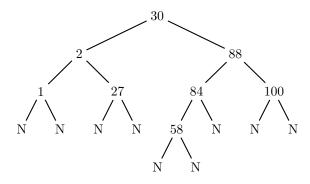
 $[99,\, 5,\, 92,\, 3,\, 61,\, 55,\, 51,\, 100]$ Binary Search Tree



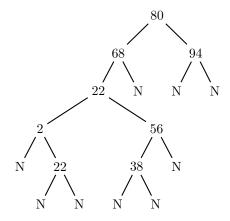


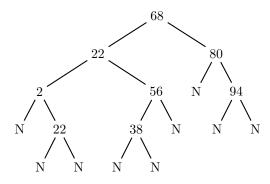
 $[30,\,100,\,88,\,2,\,84,\,27,\,1,\,58]$ Binary Search Tree



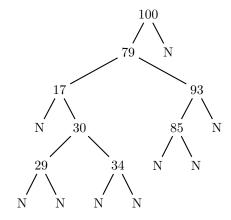


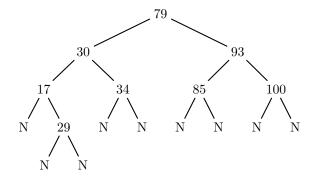
 $[80,\,68,\,22,\,56,\,2,\,94,\,38,\,22]$ Binary Search Tree



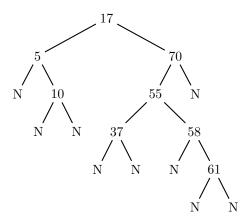


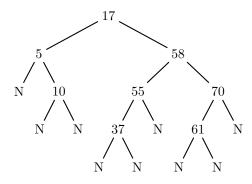
 $[100,\,79,\,17,\,93,\,30,\,34,\,85,\,29]$ Binary Search Tree



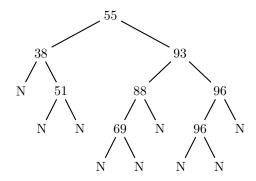


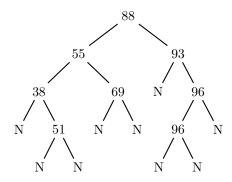
 $[17,\,5,\,70,\,55,\,58,\,10,\,61,\,37]$ Binary Search Tree



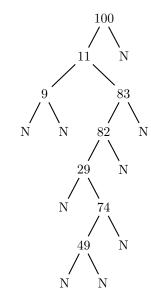


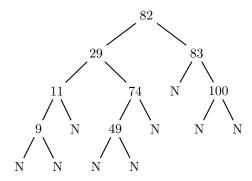
 $[55,\,38,\,93,\,88,\,96,\,69,\,96,\,51]$ Binary Search Tree



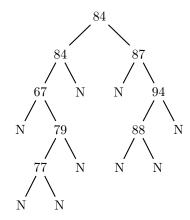


 $[100,\,11,\,83,\,82,\,29,\,74,\,9,\,49]$ Binary Search Tree

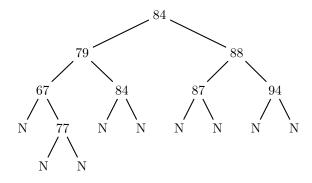




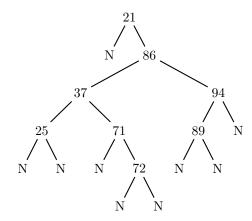
 $[84,\,87,\,84,\,67,\,94,\,79,\,77,\,88]$ Binary Search Tree

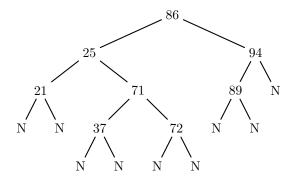


AVL Tree

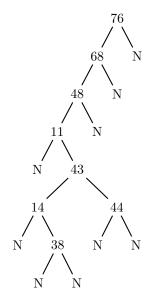


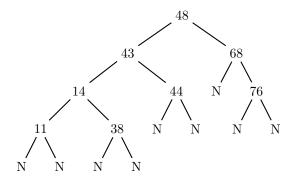
 $[21,\,86,\,94,\,37,\,89,\,25,\,71,\,72]$ Binary Search Tree



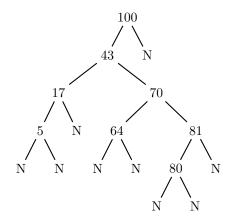


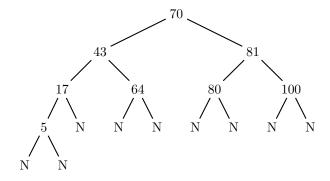
 $[76,\,68,\,48,\,11,\,43,\,44,\,14,\,38]$ Binary Search Tree



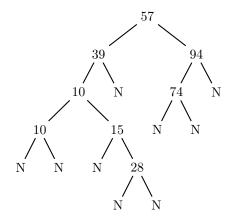


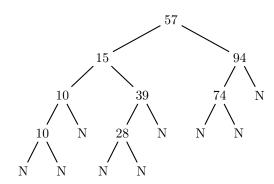
 $[100,\,43,\,70,\,64,\,81,\,17,\,5,\,80]$ Binary Search Tree



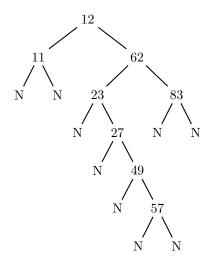


 $[57,\,94,\,39,\,10,\,74,\,10,\,15,\,28]$ Binary Search Tree

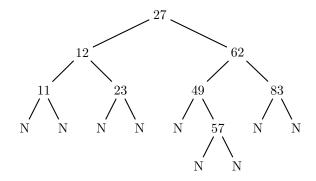




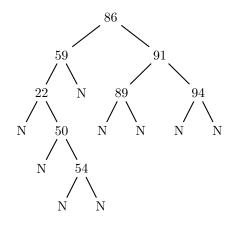
 $[12,\,11,\,62,\,23,\,27,\,49,\,83,\,57]$ Binary Search Tree

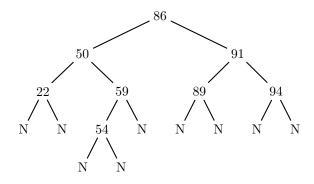


AVL Tree

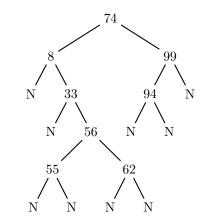


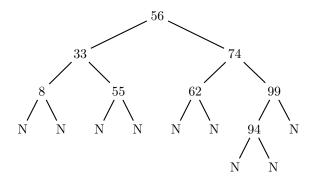
 $[86,\,91,\,59,\,89,\,94,\,22,\,50,\,54]$ Binary Search Tree



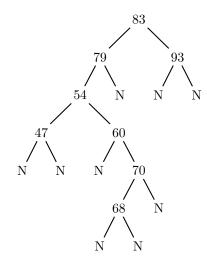


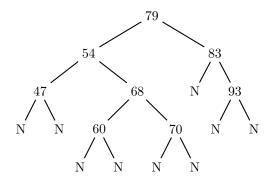
 $[74,\,8,\,33,\,56,\,99,\,62,\,94,\,55]$ Binary Search Tree



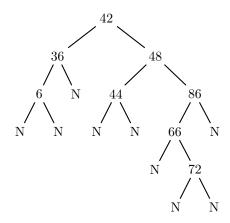


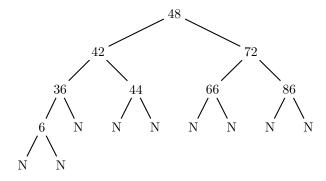
 $[83,\,79,\,54,\,93,\,47,\,60,\,70,\,68]$ Binary Search Tree



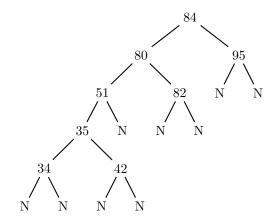


 $[42,\,36,\,48,\,44,\,86,\,66,\,72,\,6]$ Binary Search Tree

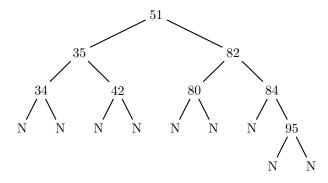




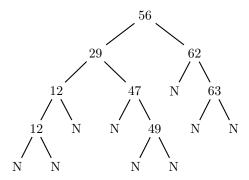
 $[84,\,80,\,82,\,51,\,35,\,34,\,95,\,42]$ Binary Search Tree

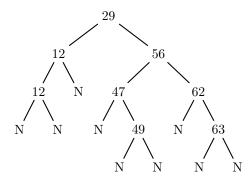


AVL Tree

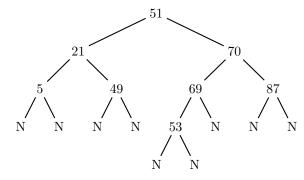


 $[56,\, 29,\, 12,\, 62,\, 12,\, 47,\, 49,\, 63]$ Binary Search Tree

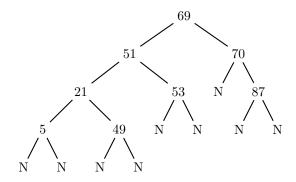




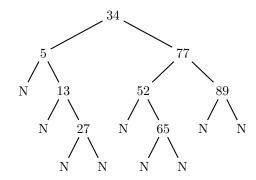
 $[51,\,70,\,21,\,69,\,53,\,87,\,49,\,5]$ Binary Search Tree

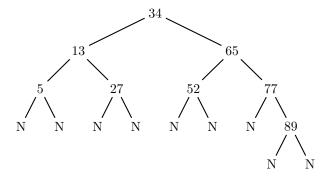


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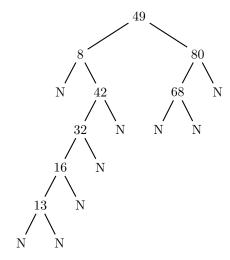


 $[34,\,5,\,77,\,13,\,27,\,52,\,65,\,89]$ Binary Search Tree

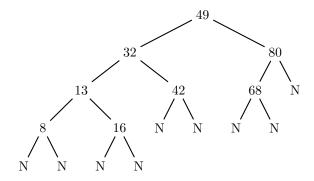




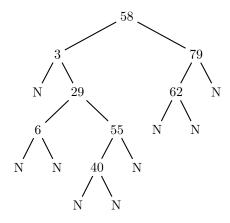
 $[49,\,8,\,80,\,68,\,42,\,32,\,16,\,13]$ Binary Search Tree

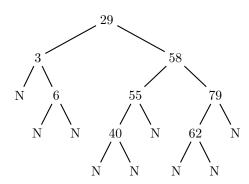


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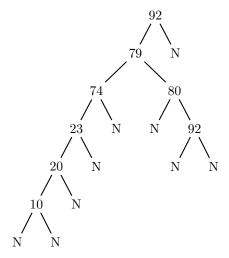


 $[58,\,3,\,29,\,79,\,55,\,6,\,62,\,40]$ Binary Search Tree

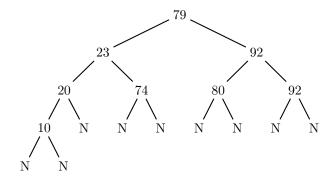




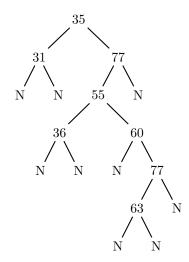
 $[92,\,79,\,74,\,80,\,92,\,23,\,20,\,10]$ Binary Search Tree

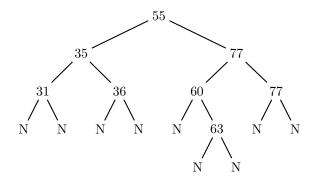


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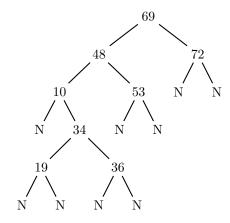


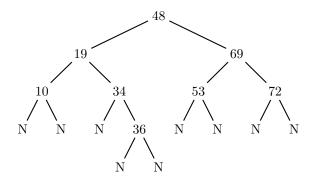
 $[35,\,77,\,55,\,60,\,31,\,77,\,36,\,63]$ Binary Search Tree



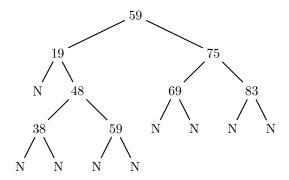


 $[69,\,48,\,10,\,72,\,53,\,34,\,19,\,36]$ Binary Search Tree





 $[59,\,19,\,48,\,75,\,38,\,59,\,69,\,83]$ Binary Search Tree



AVL Tree

