

Title: AVL Trees

Author: Pınar Yücel

ID: 21802188

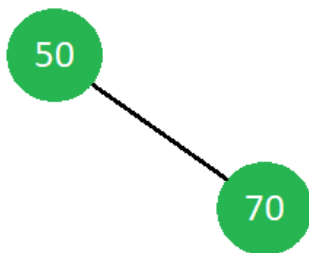
Assignment: 4

a) AVL tree

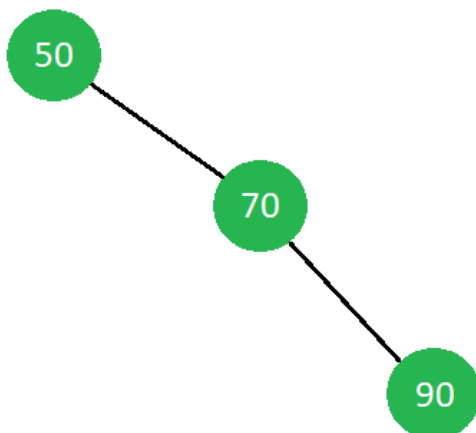
After insertion (50)

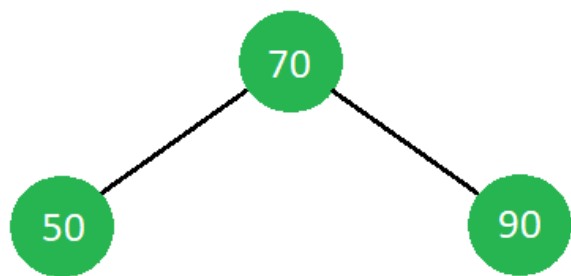


After insertion (70)

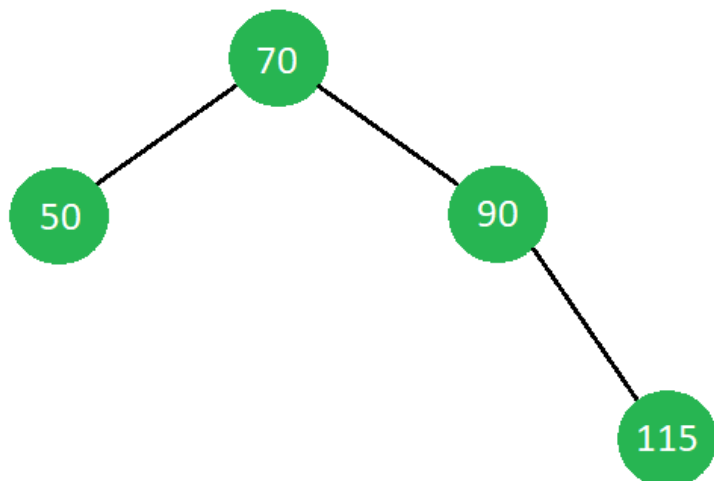


After insertion (90)

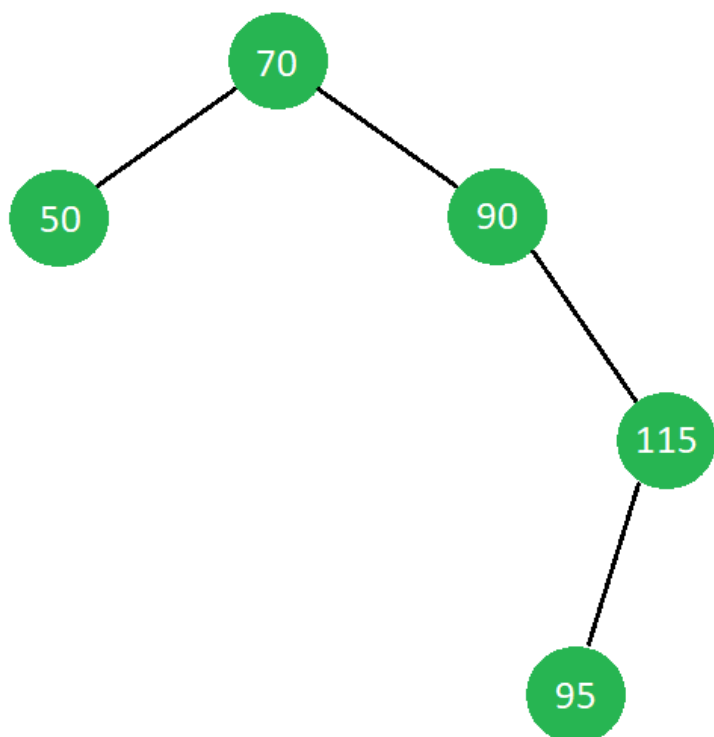


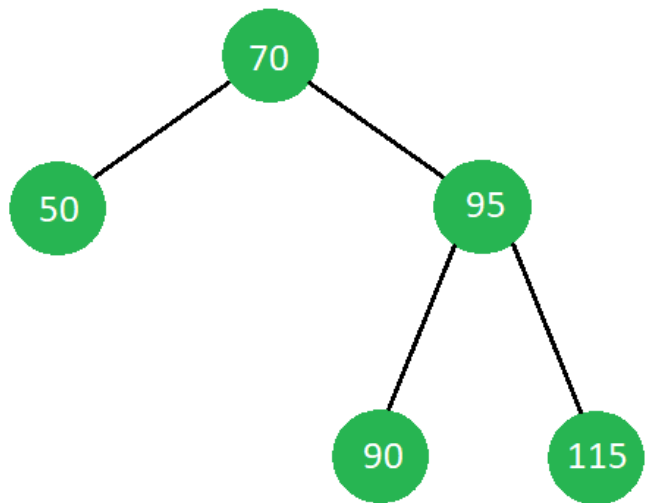
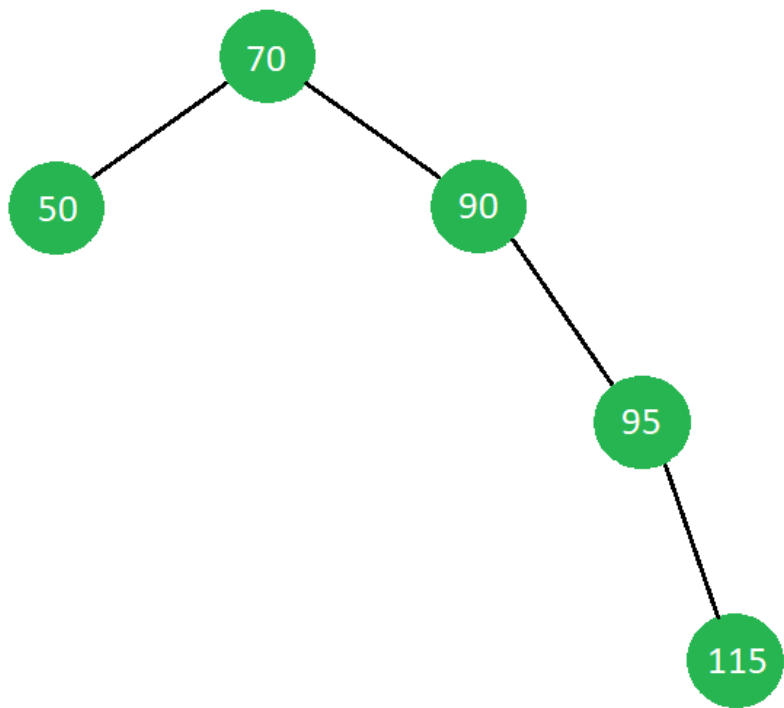


After insertion (115)

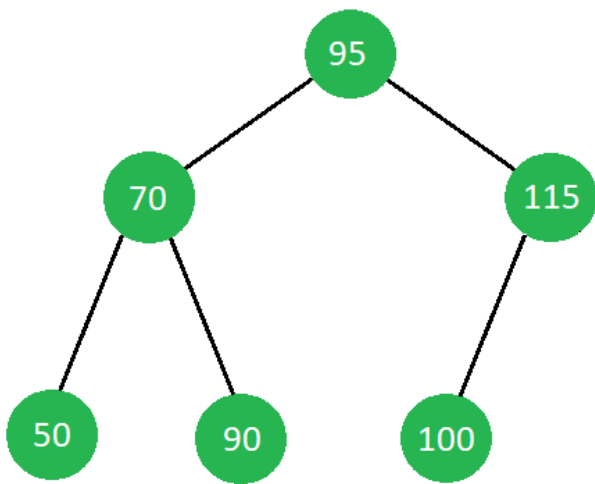
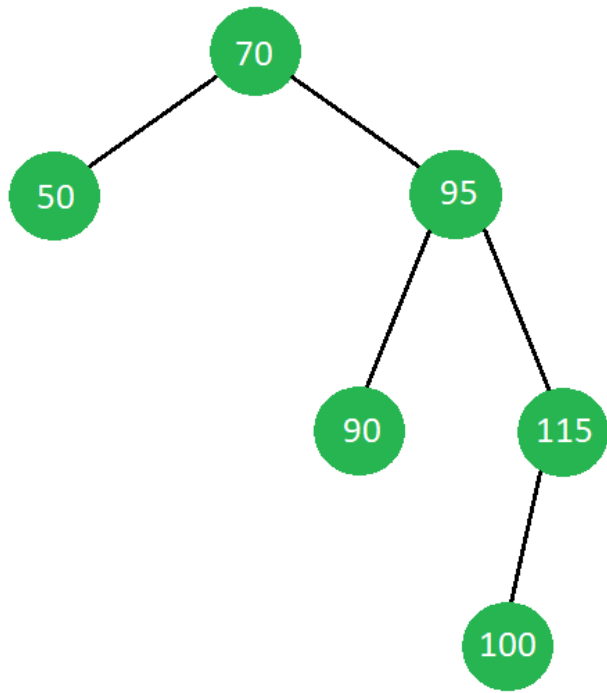


After insertion (95)

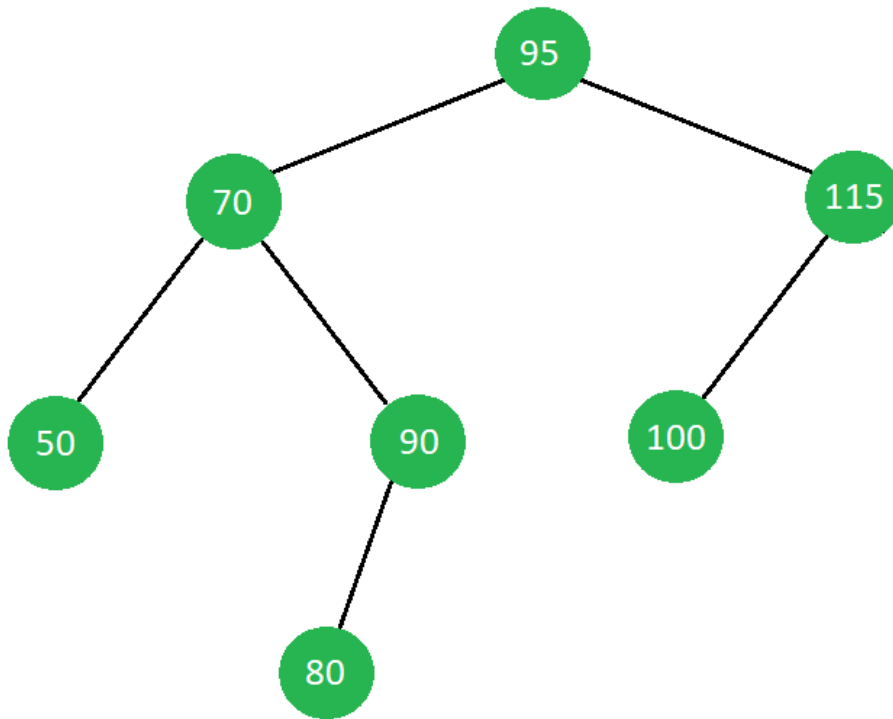




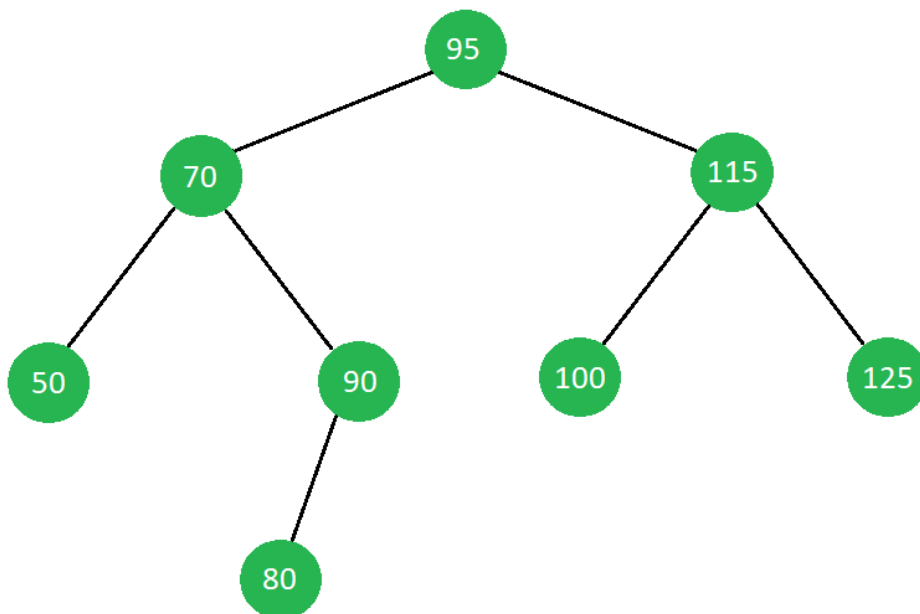
After insertion (100)



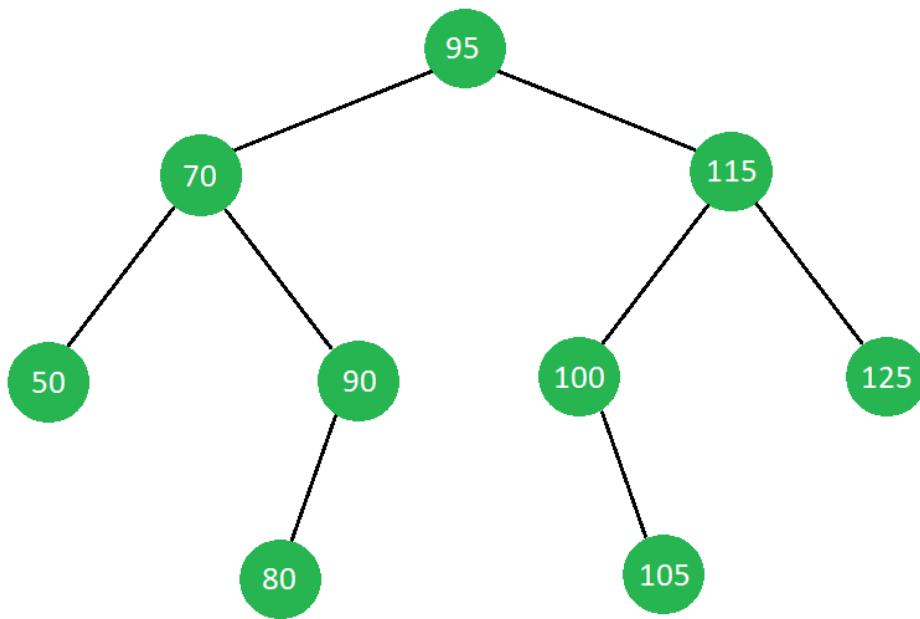
After insertion (80)



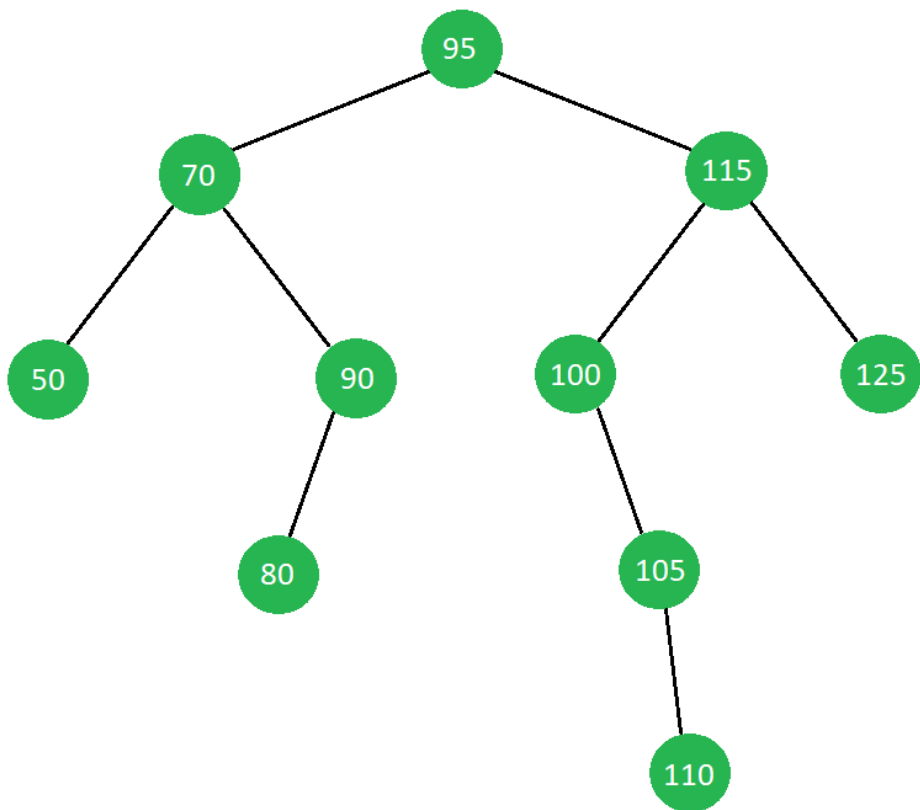
After insertion (125)

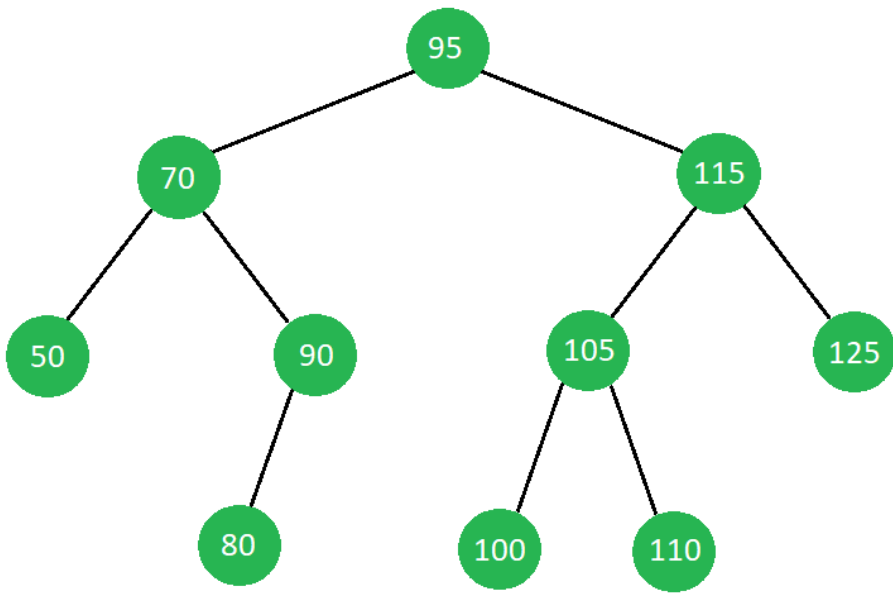


After insertion (105)

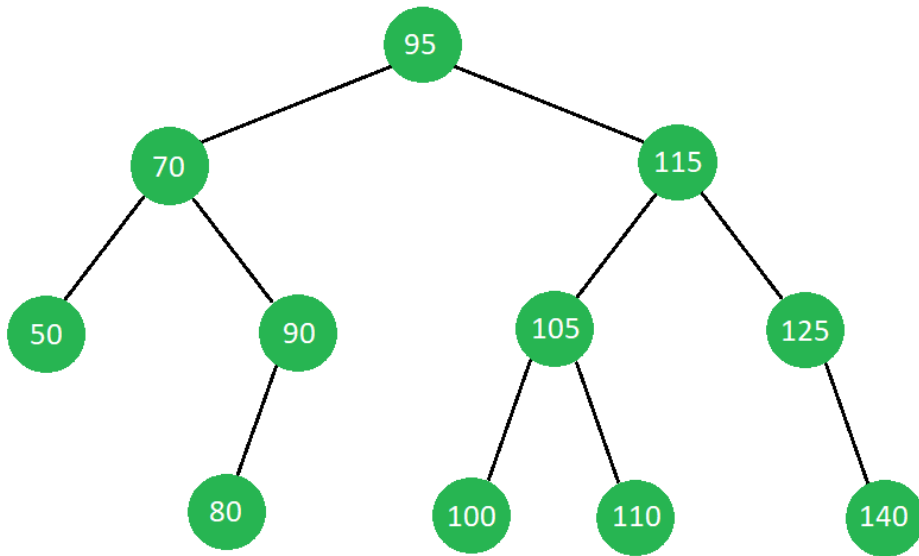


After insertion (110)

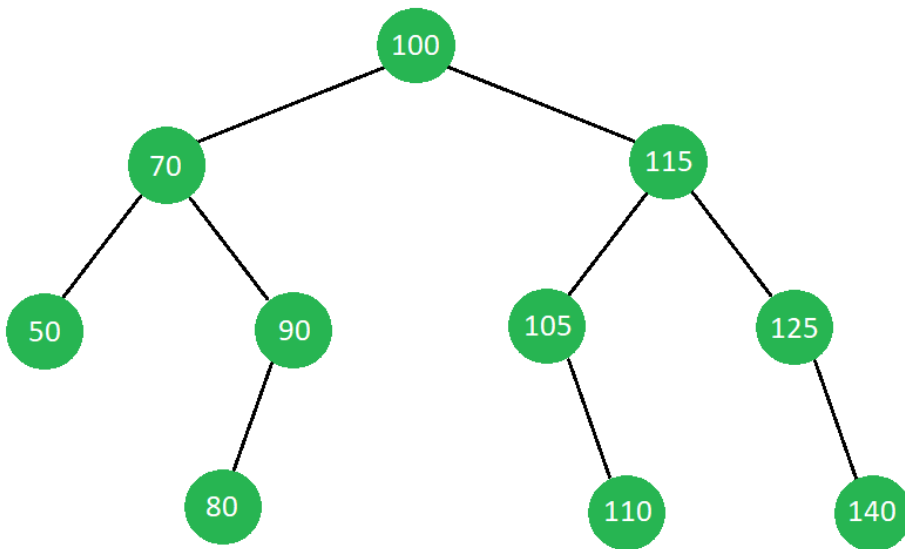
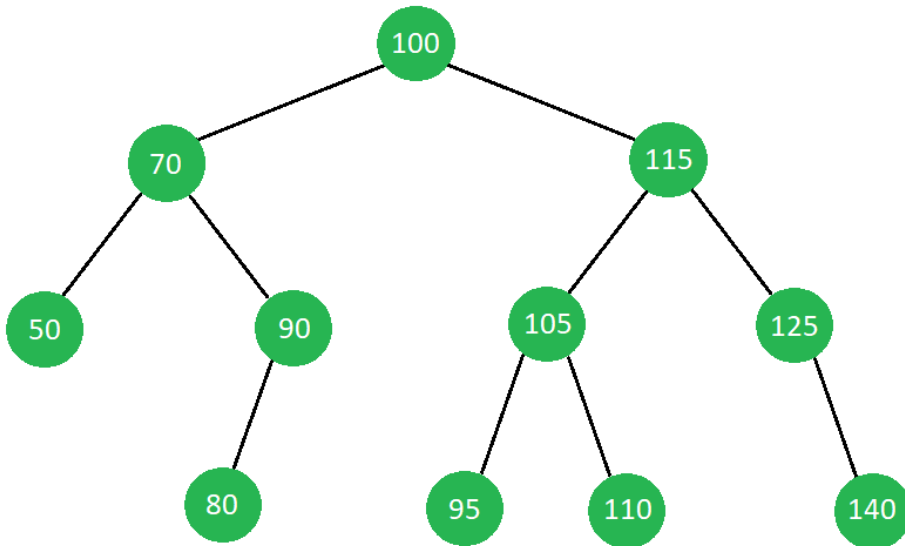




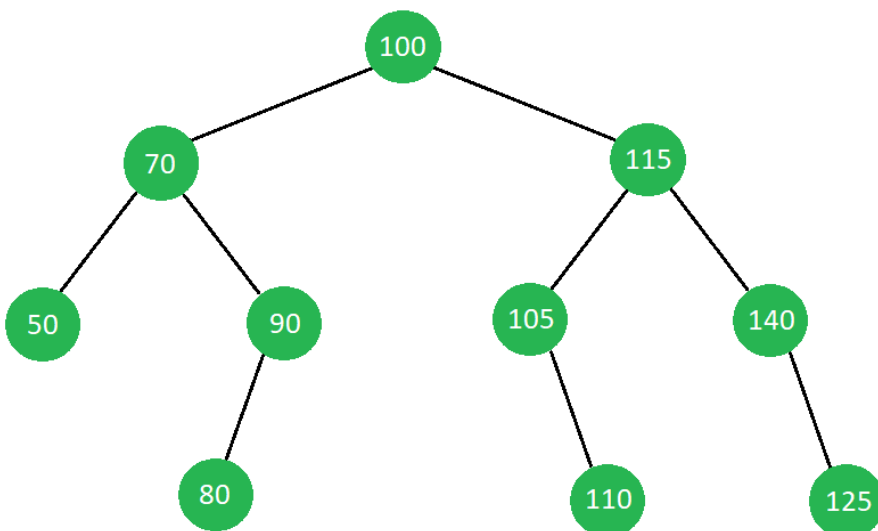
After insertion (140)

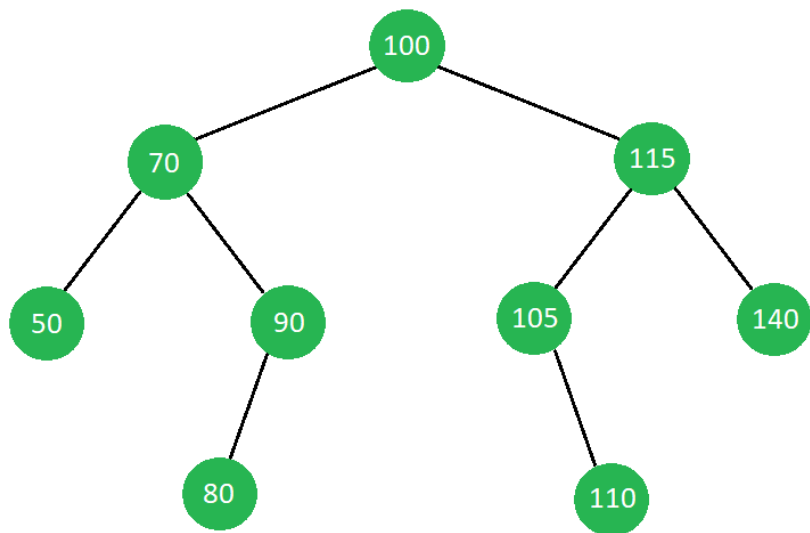


After deletion (95)

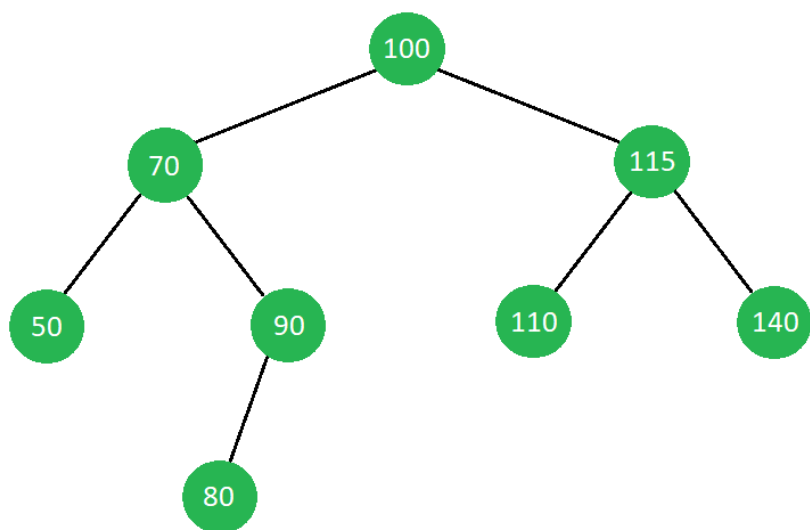
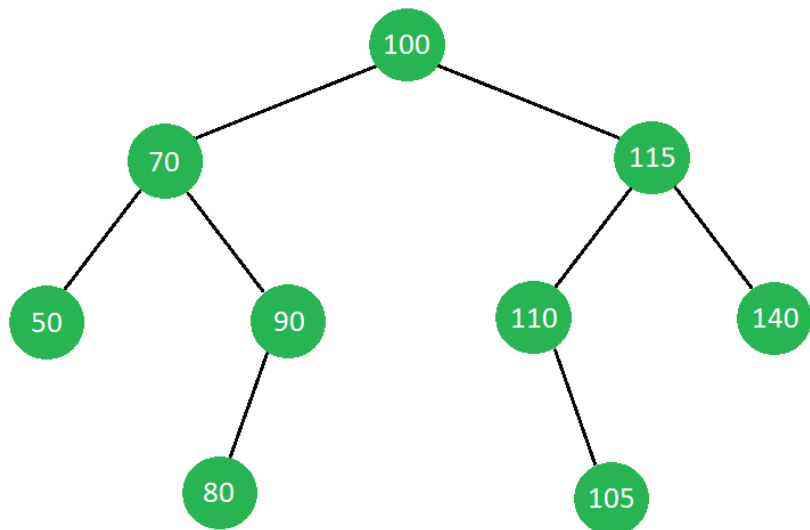


After deletion (125)





After deletion (105)



b) 2-3 tree

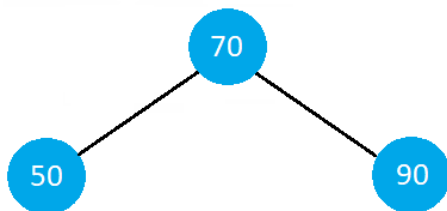
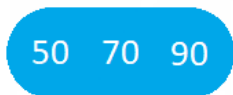
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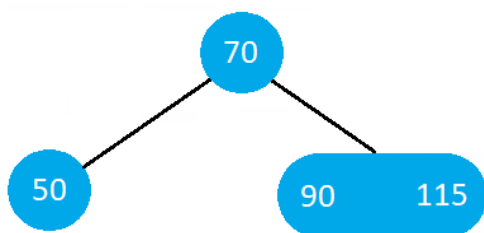
After insertion (70)



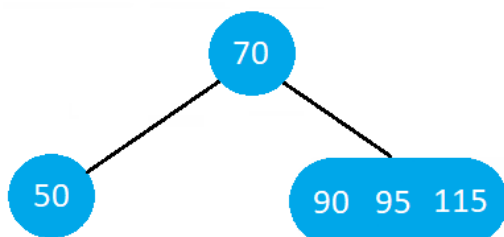
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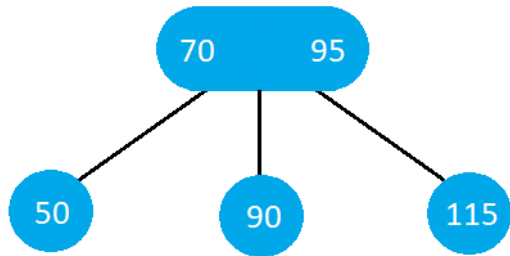


After insertion (115)

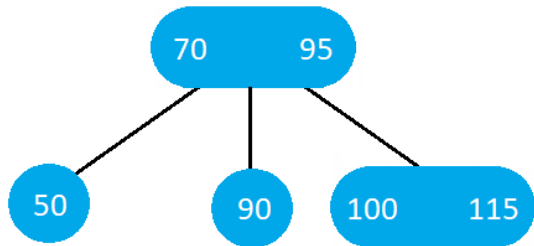


After insertion (95)

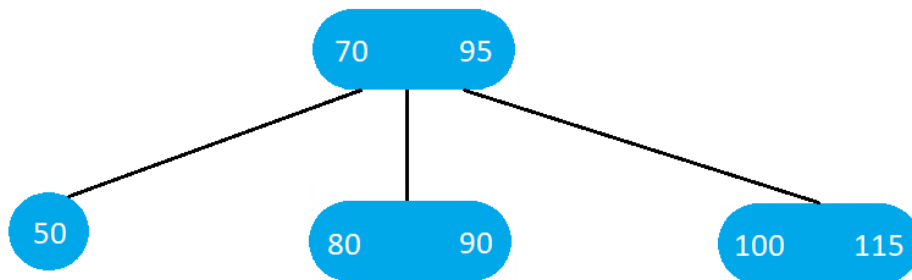




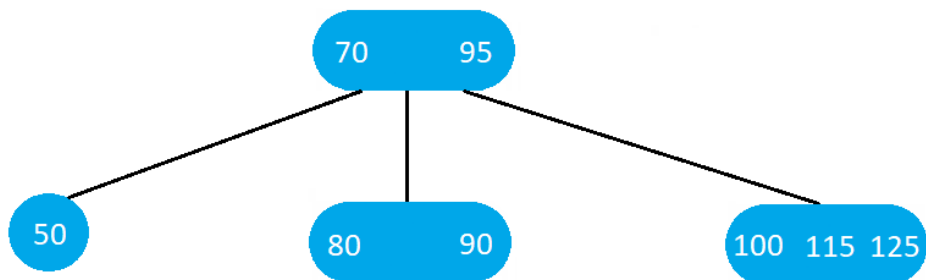
After insertion (100)

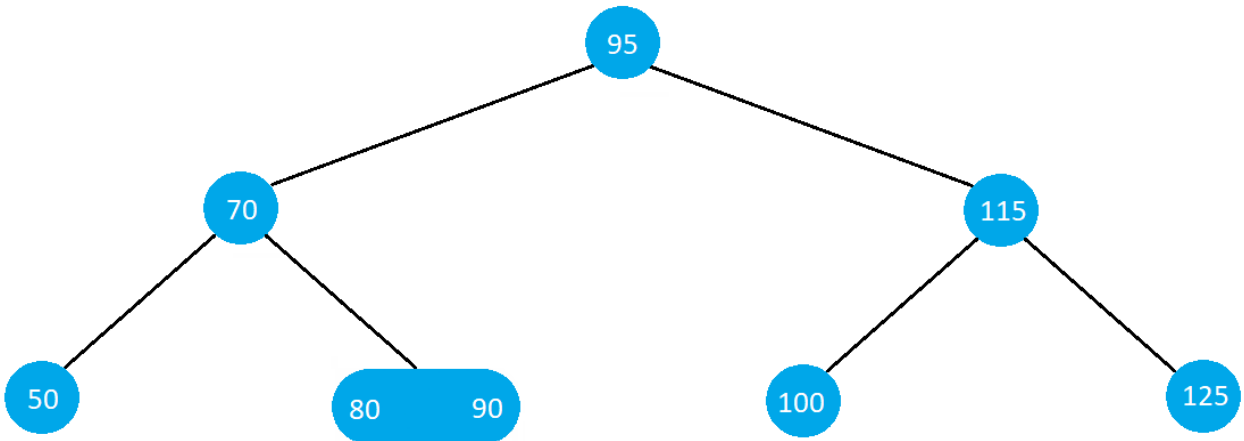
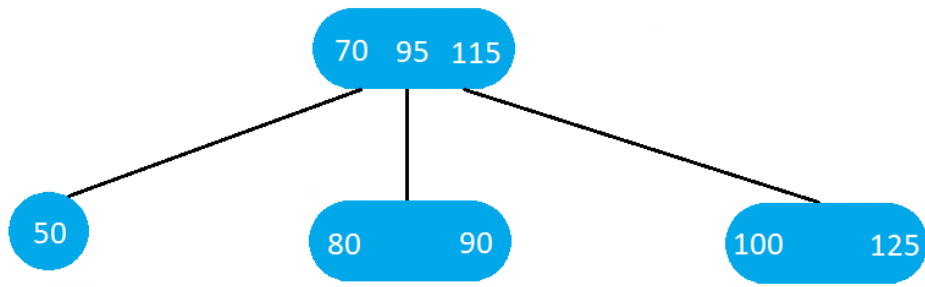


After insertion (80)

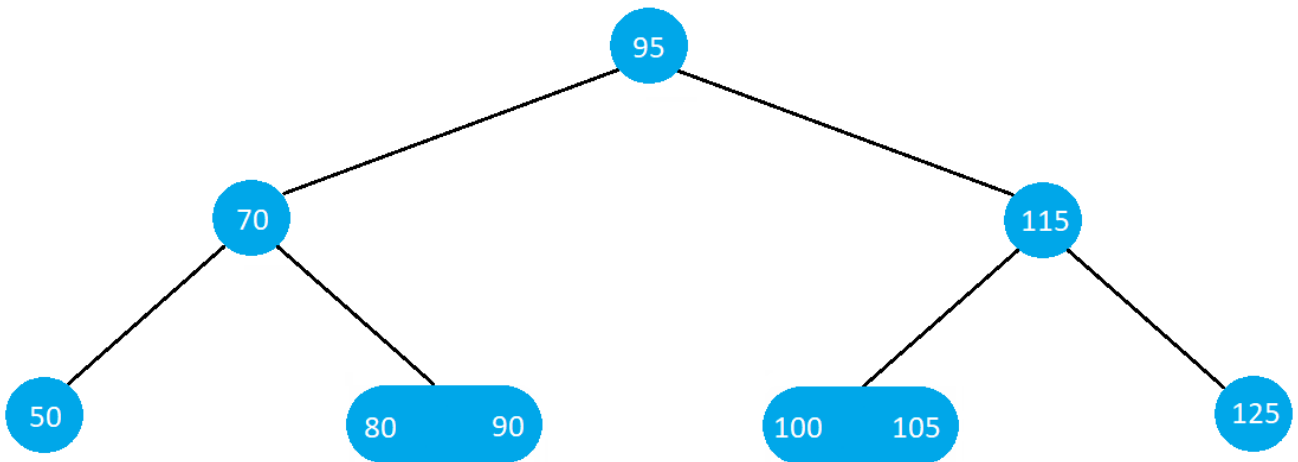


After insertion (125)

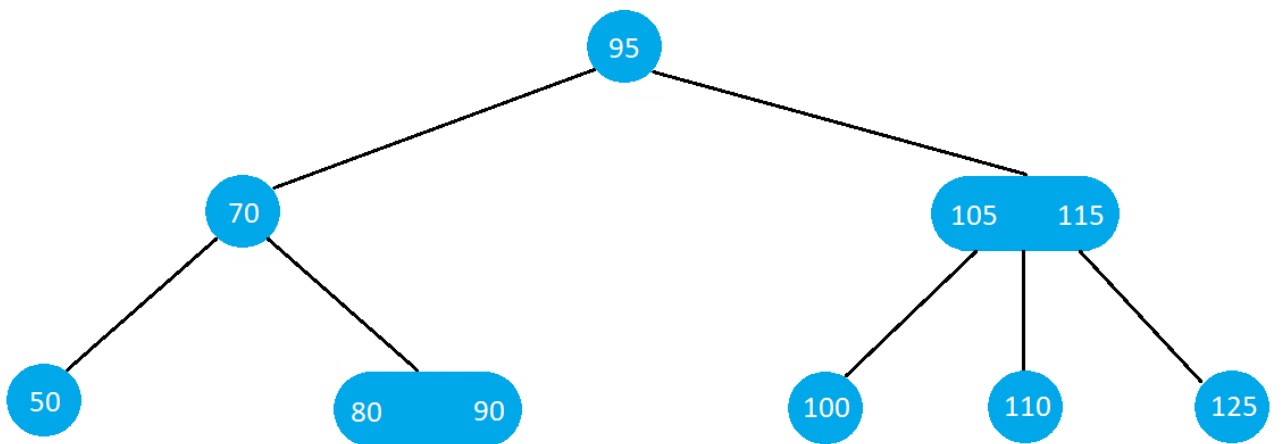
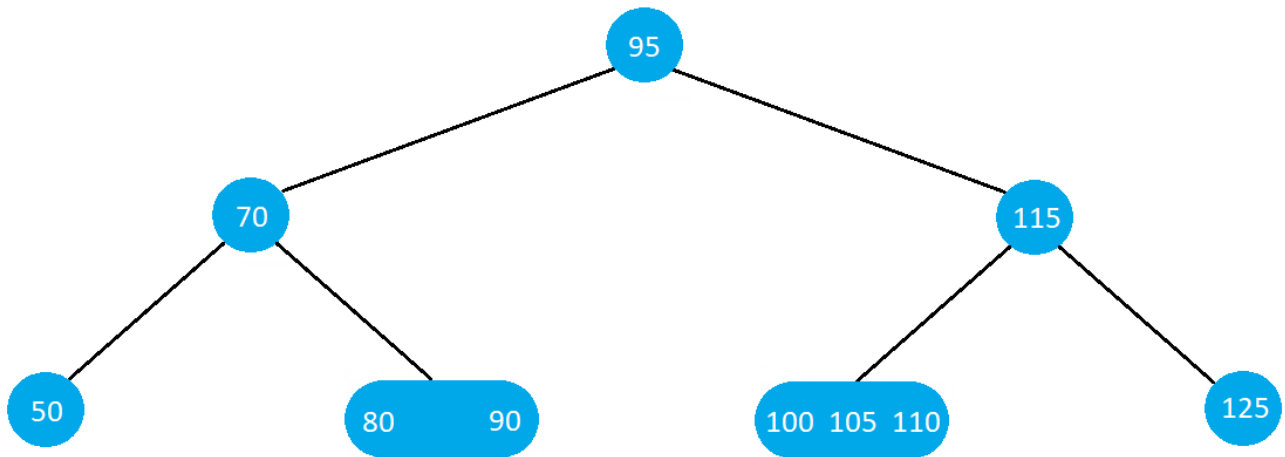




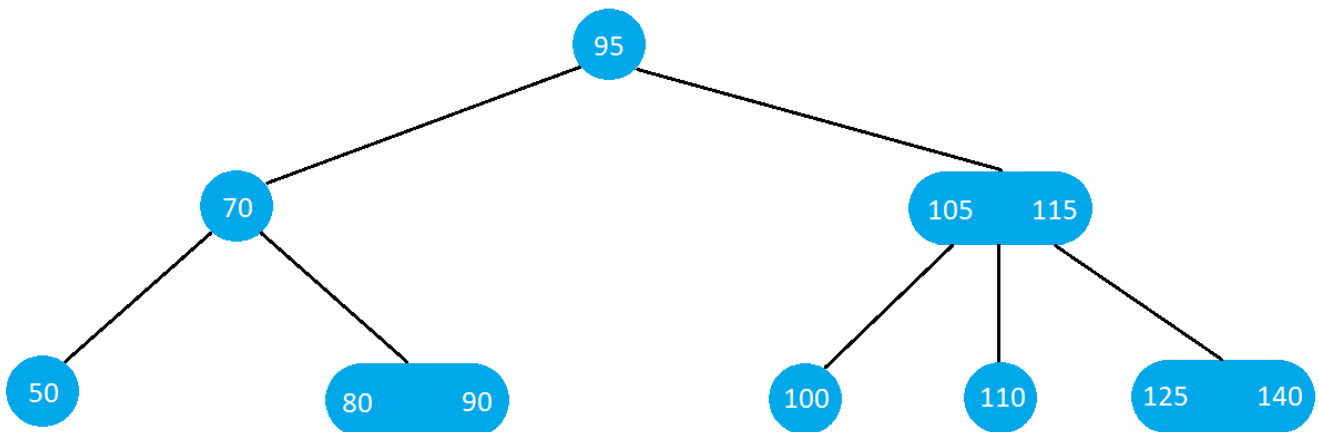
After insertion (105)



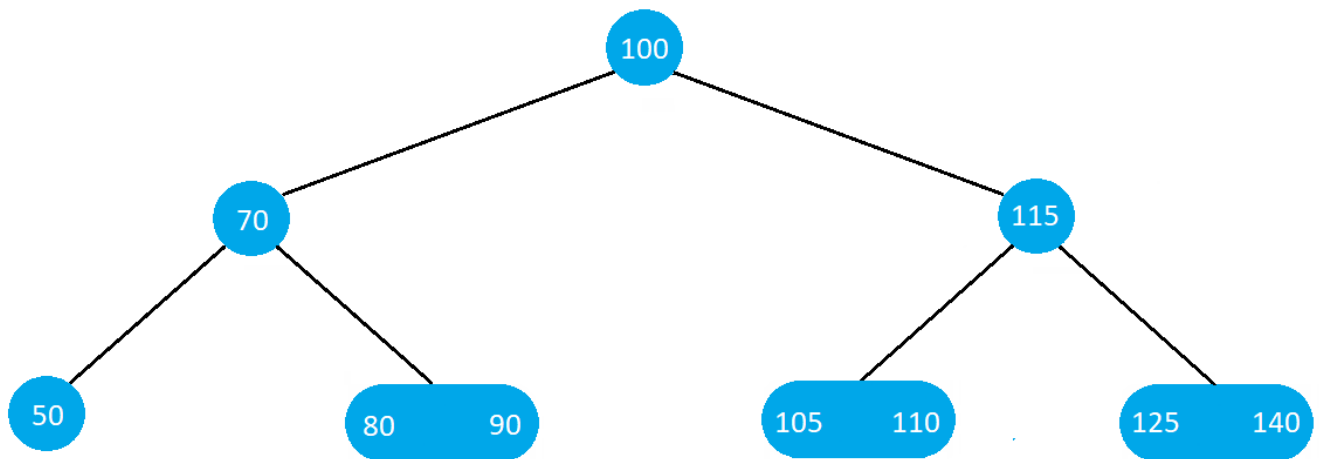
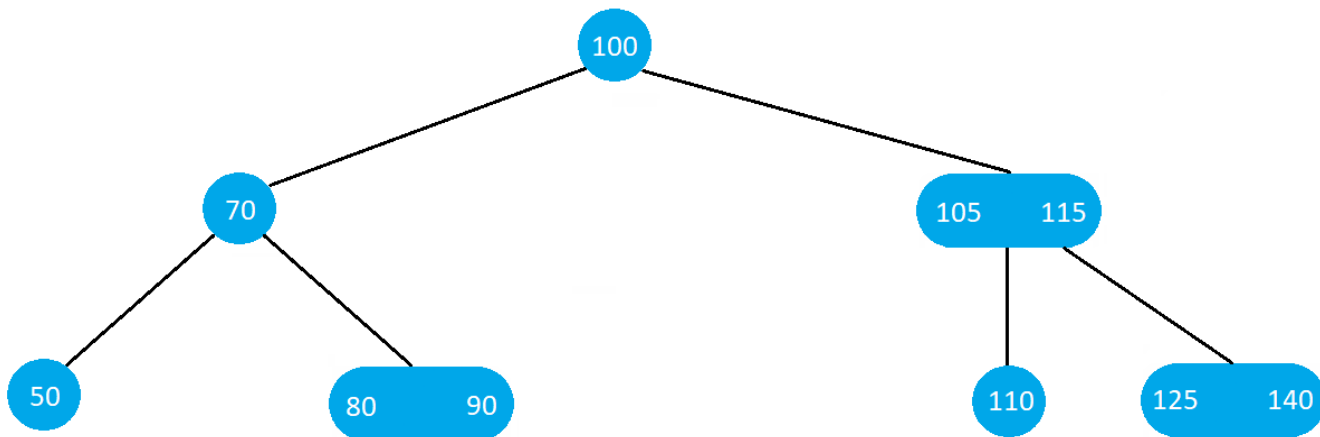
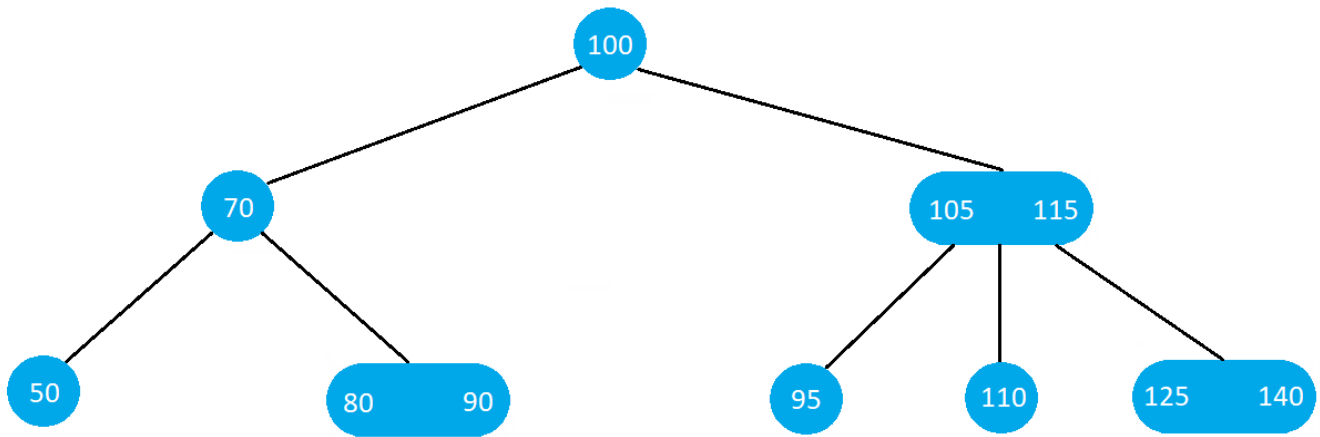
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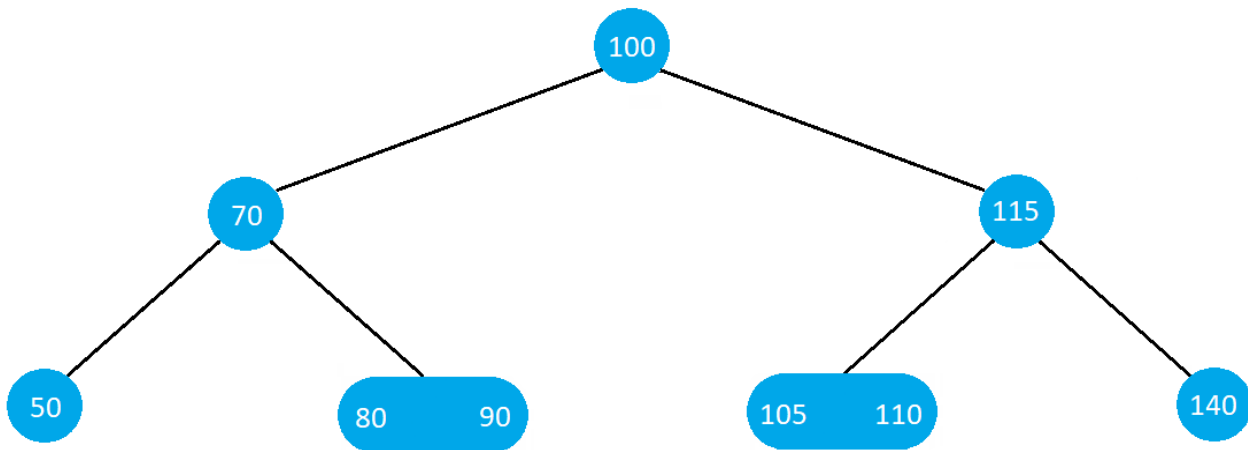
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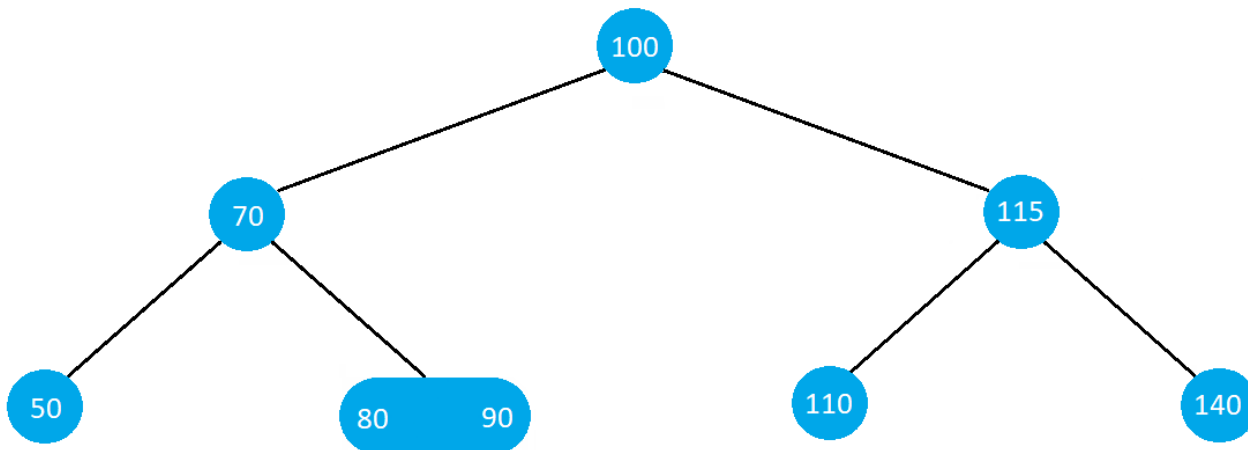
After deletion (95)



After deletion (125)



After deletion (105)



c) 2-3-4 tree

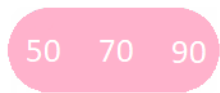
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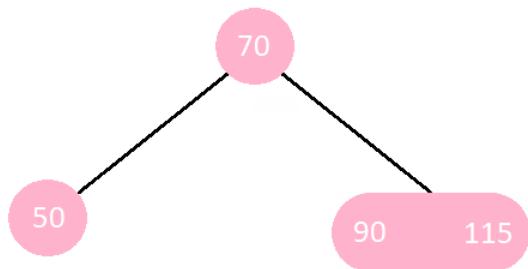
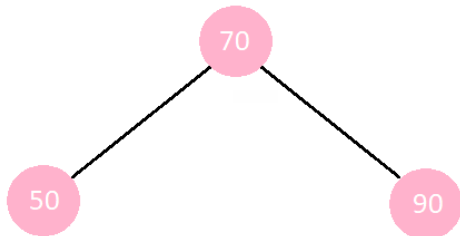
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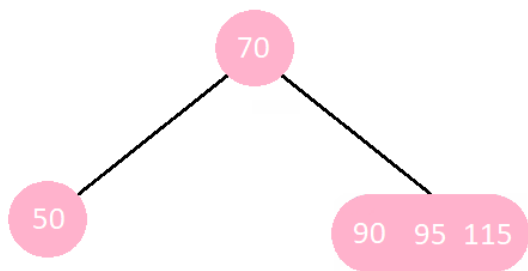
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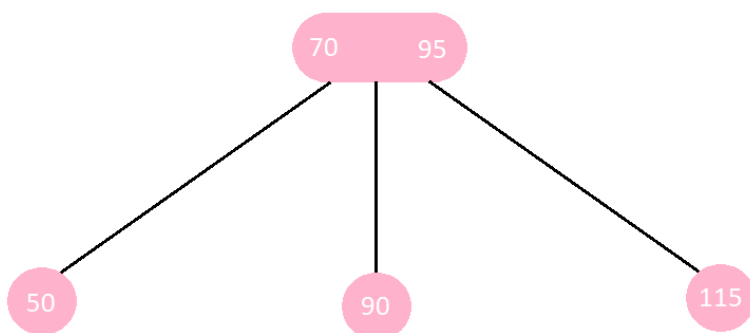
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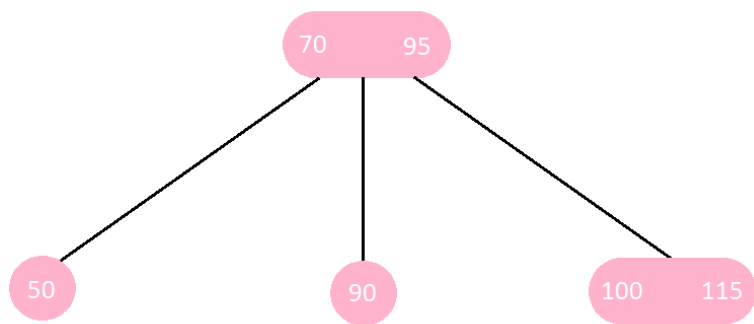


After insertion (95)

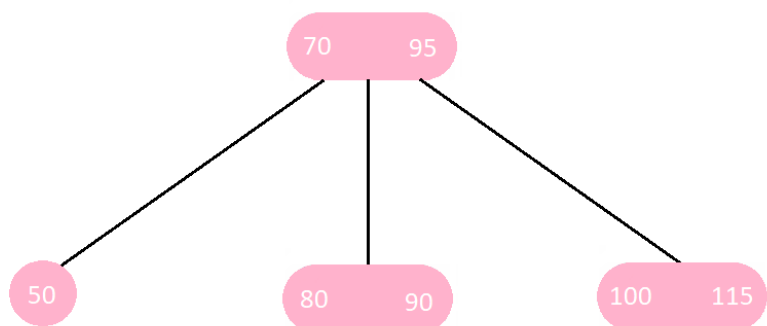


After insertion (100)

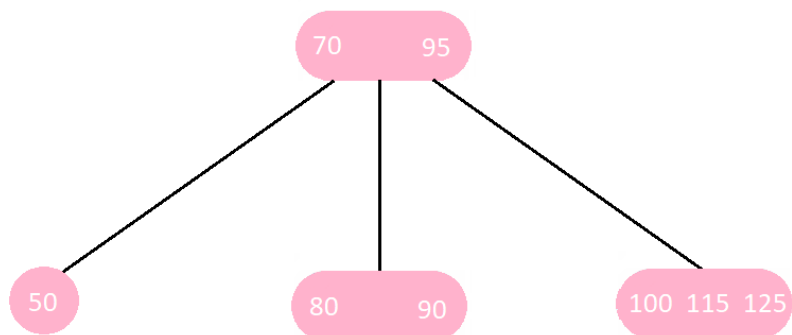




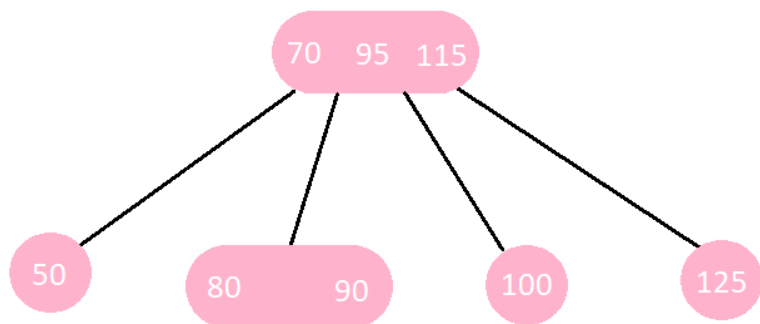
After insertion (80)

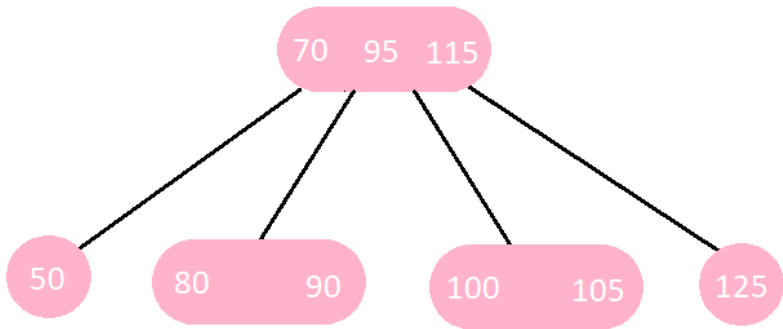


After insertion (125)

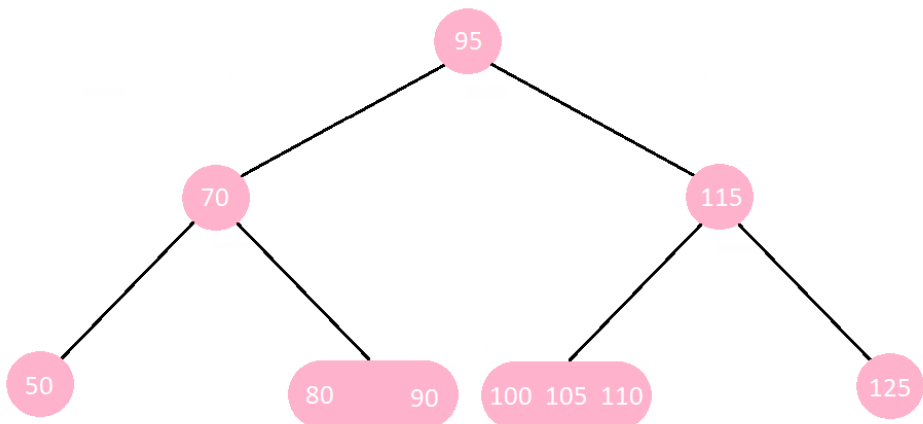
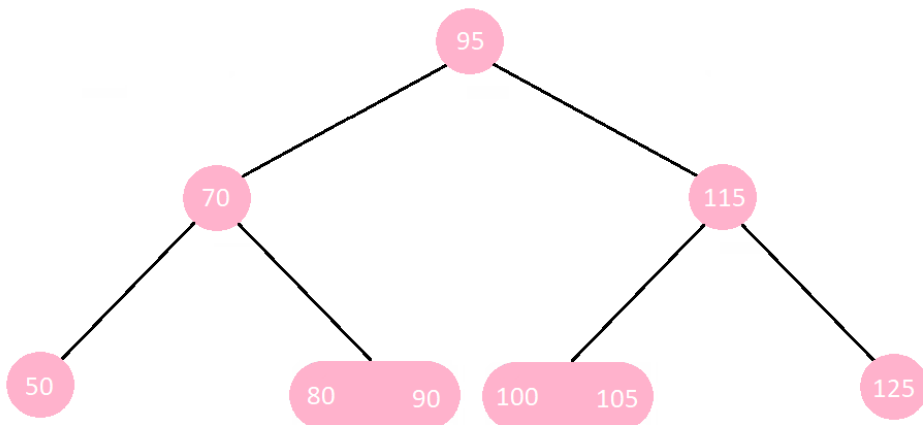


After insertion (105)

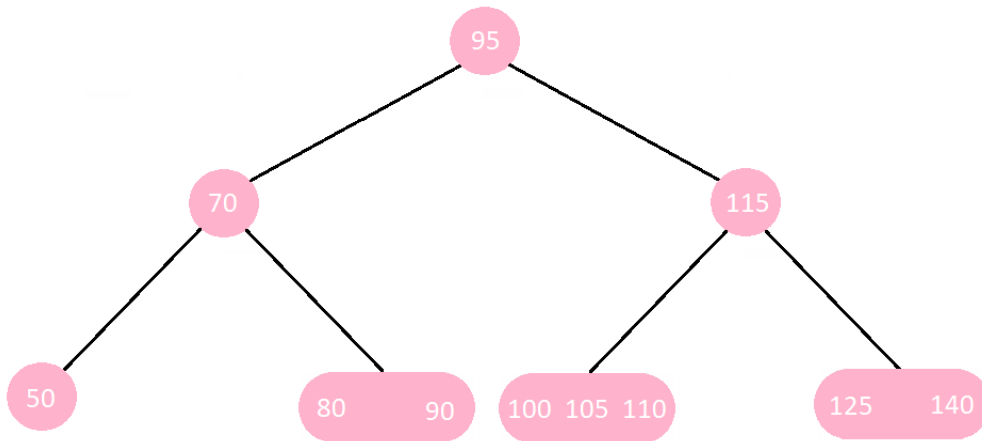




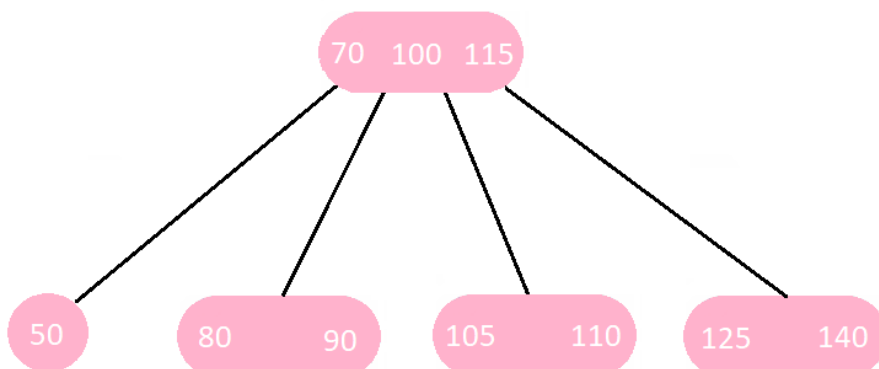
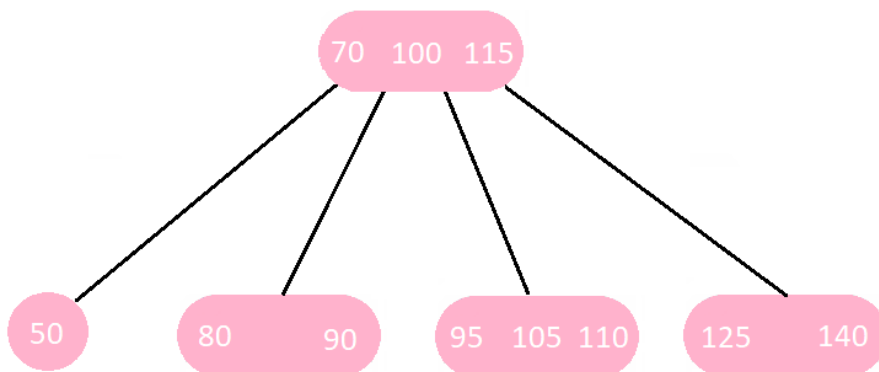
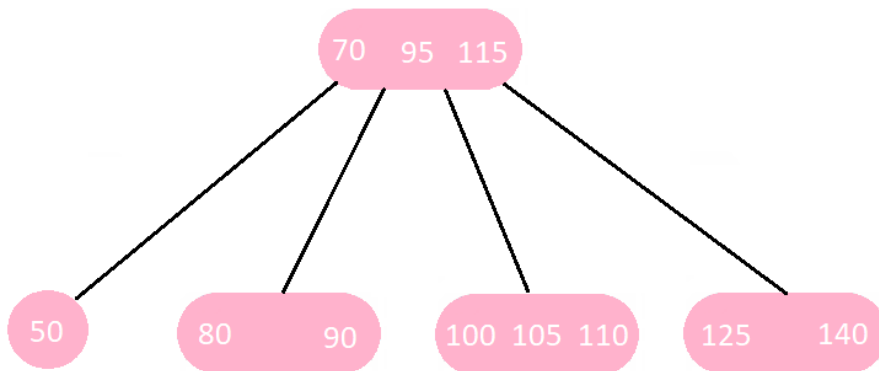
After insertion (110)



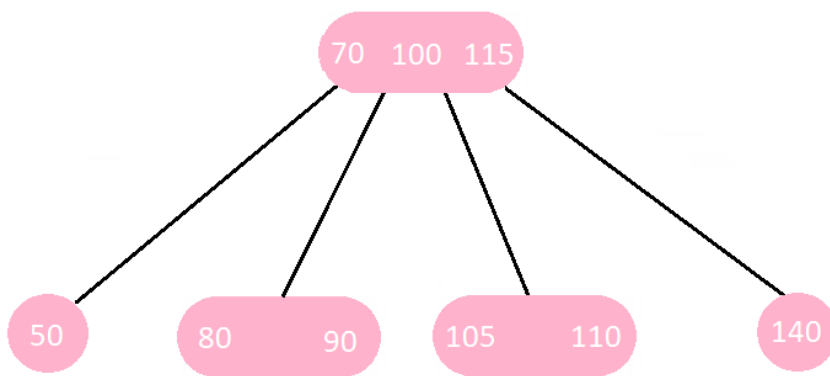
After insertion (140)



After deletion (95)



After deletion (125)



After deletion (105)

