

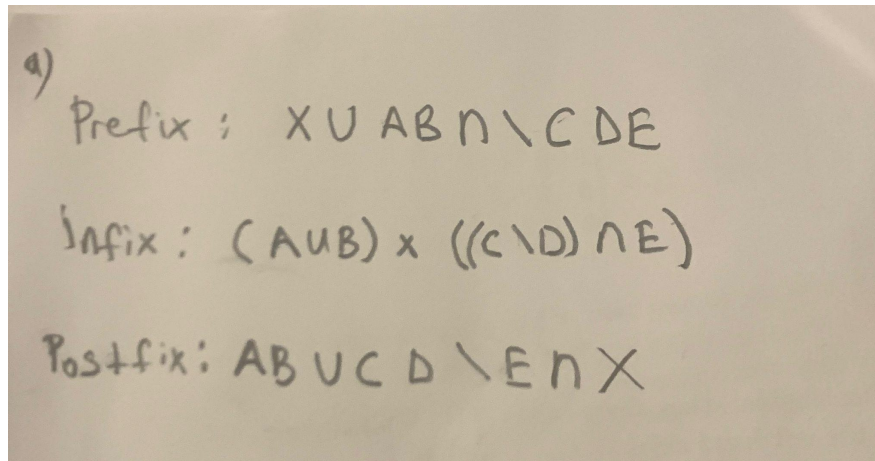
Name: Kutay Şenyiğit

ID: 2102377

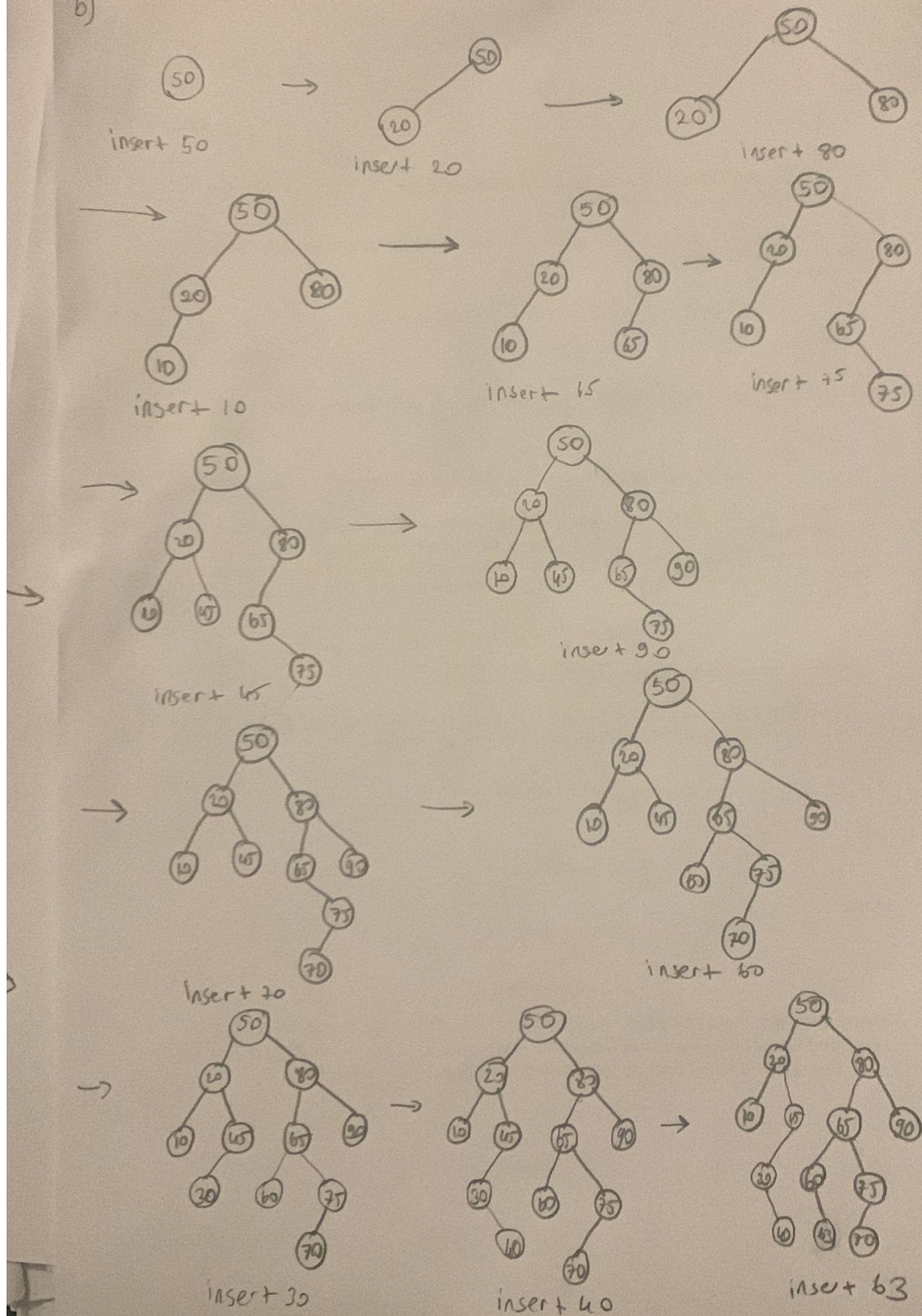
Section: 3

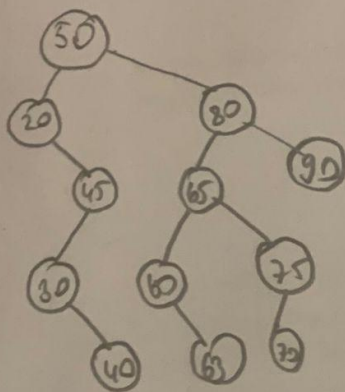
Homework: 2

Question 1:

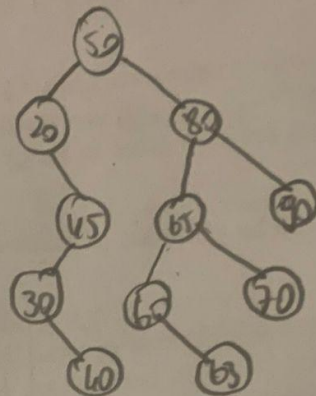


b)

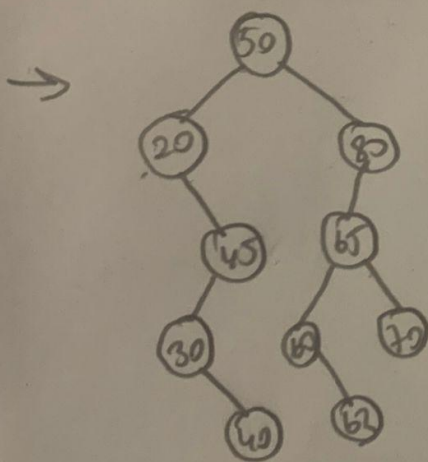




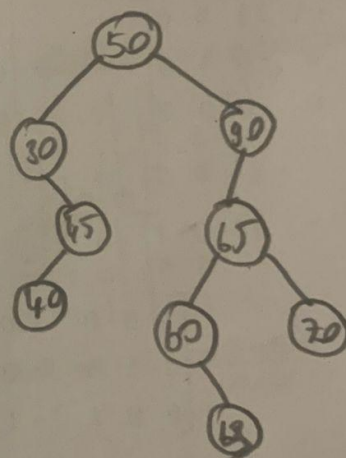
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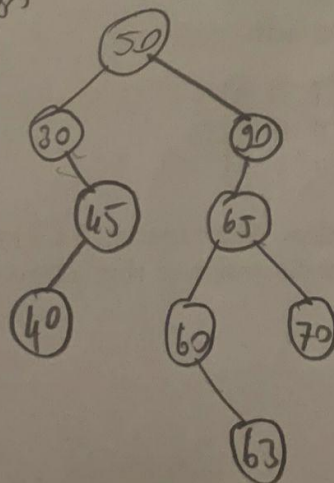
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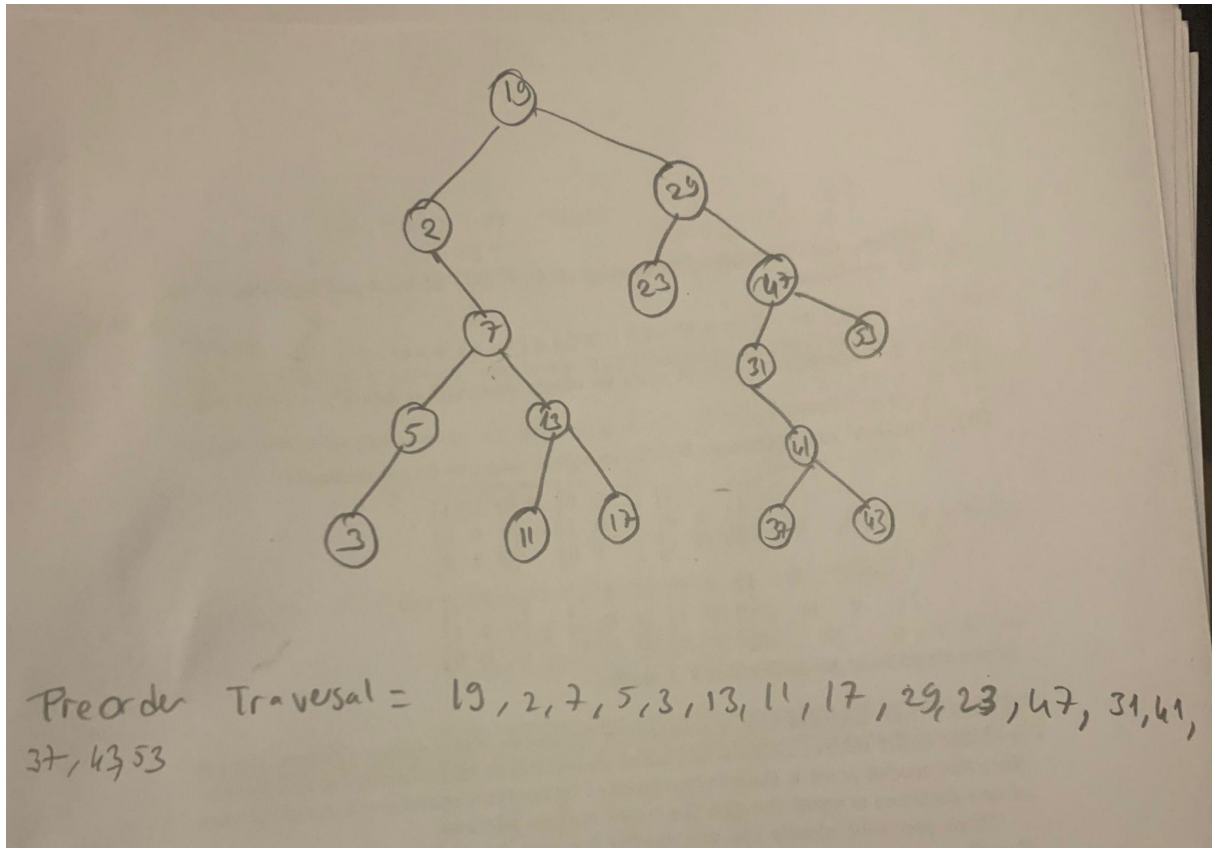


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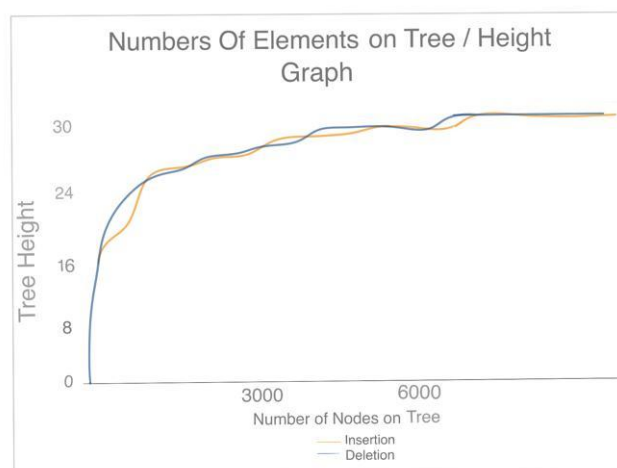


Delete 50

c)



Question 3:



We observed the changes in the height of BTS. We created an array with a size of 10000 and tested it. We inserted random elements and removed them. Theoretically, for an average case height of three has $O(\log n)$ time complexity. In the reality, it's close to what it should be as we can see in the graph. Also we can see that low height operations require less time.