

Q1)

a)

Prefix: X U A B N \ C D E

Infix: A U B X C \ D N E

Postfix: A B C D \ E U A X

b)

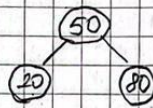
1)



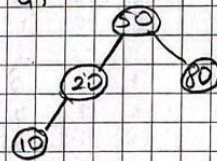
2)



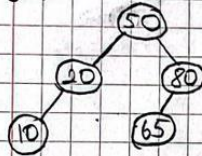
3)



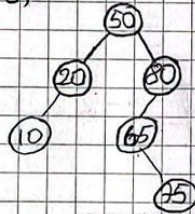
4)



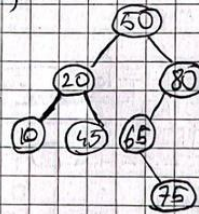
5)



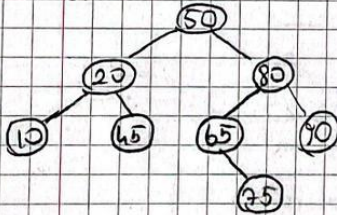
6)



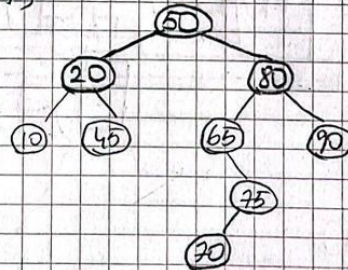
7)



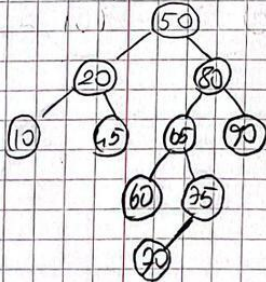
8)



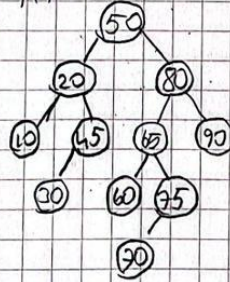
9)



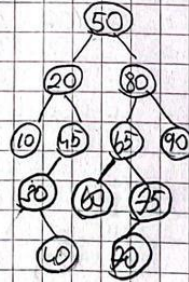
10)



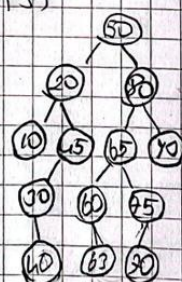
11)



12)



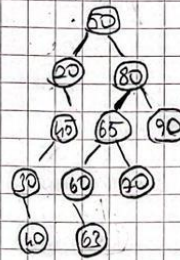
13)



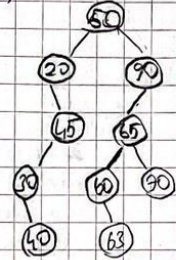
14)



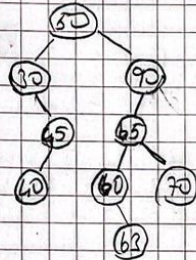
15)



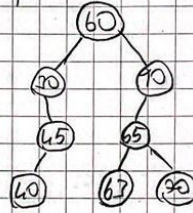
16)



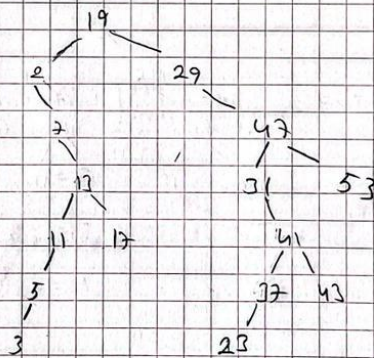
17)



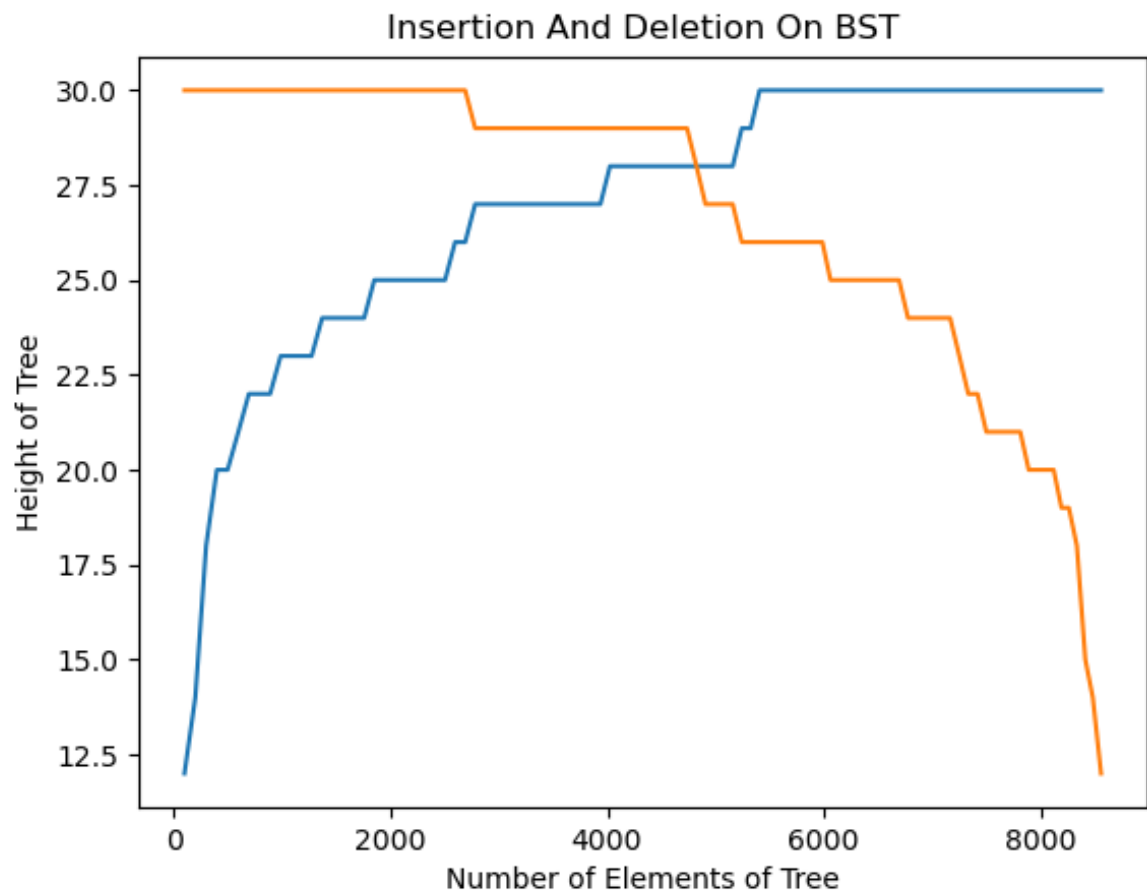
18)



C)



Preorder : 19, 2, 7, 13, 11, 5, 3, 17, 29, 47, 31, 41, 37, 23, 43, 53



Conclusion

I think the graph look correct to me because after a while the height of tree incresing when more element inserted and opposite for deletion.