
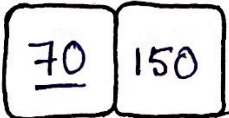
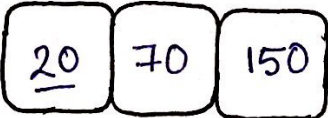
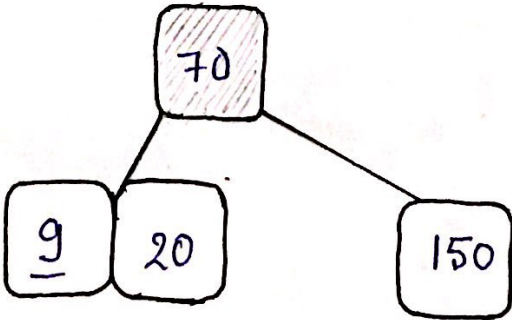
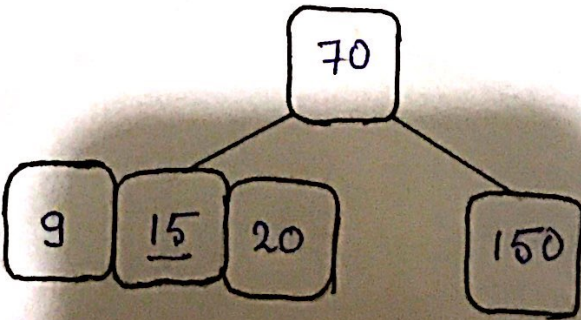


Homework #3

Task 1

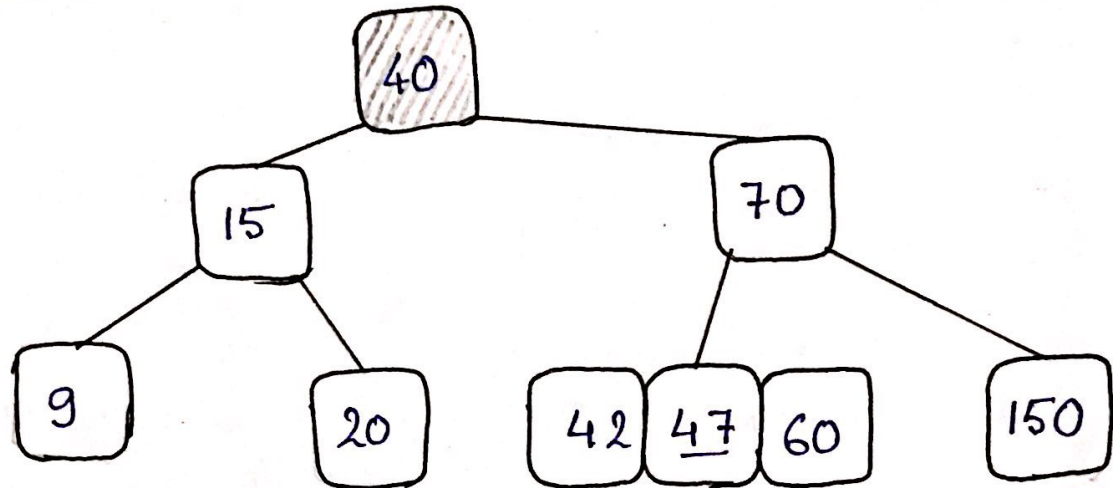
Node inserted	Tree
150	
70	
20	
9 using proactive approach splitting the root	
15	

Node inserted	Tree
<p>60 splitting 9/15/20 node, using proactive approach</p>	<pre> graph TD Root1[] --- L1[15] Root1 --- L2[70] Root1 --- L3[] L1 --- L1L[9] L1 --- L1M[20] L1 --- L1R[60] L2 --- L2L[150] style L1 fill:#f0f0f0 style L1L fill:#f0f0 style L1M fill:#f0f0 style L1R fill:#f0f0 style L2L fill:#f0f0 </pre>
<p>40</p>	<pre> graph TD Root2[] --- L4[15] Root2 --- L5[70] Root2 --- L6[] L4 --- L4L[9] L4 --- L4M[20] L4 --- L4R1[40] L4 --- L4R2[60] L5 --- L5L[150] style L4L fill:#f0f0 style L4M fill:#f0f0 style L4R1 fill:#f0f0 style L4R2 fill:#f0f0 style L5L fill:#f0f0 </pre>
<p>42 splitting 20/40/60 using proactive approach</p>	<pre> graph TD Root3[] --- L7[15] Root3 --- L8[40] Root3 --- L9[70] L7 --- L7L[9] L7 --- L7R[20] L8 --- L8L[42] L8 --- L8R[60] L9 --- L9L[150] style L8 fill:#f0f0 style L8L fill:#f0f0 style L8R fill:#f0f0 style L7L fill:#f0f0 style L7R fill:#f0f0 style L9L fill:#f0f0 </pre>
<p>47</p>	<pre> graph TD Root4[] --- L10[15] Root4 --- L11[40] Root4 --- L12[70] L10 --- L10L[9] L10 --- L10R[20] L11 --- L11L[42] L11 --- L11M[47] L11 --- L11R[60] L12 --- L12L[150] style L11L fill:#f0f0 style L11M fill:#f0f0 style L11R fill:#f0f0 style L10L fill:#f0f0 style L10R fill:#f0f0 style L12L fill:#f0f0 </pre>

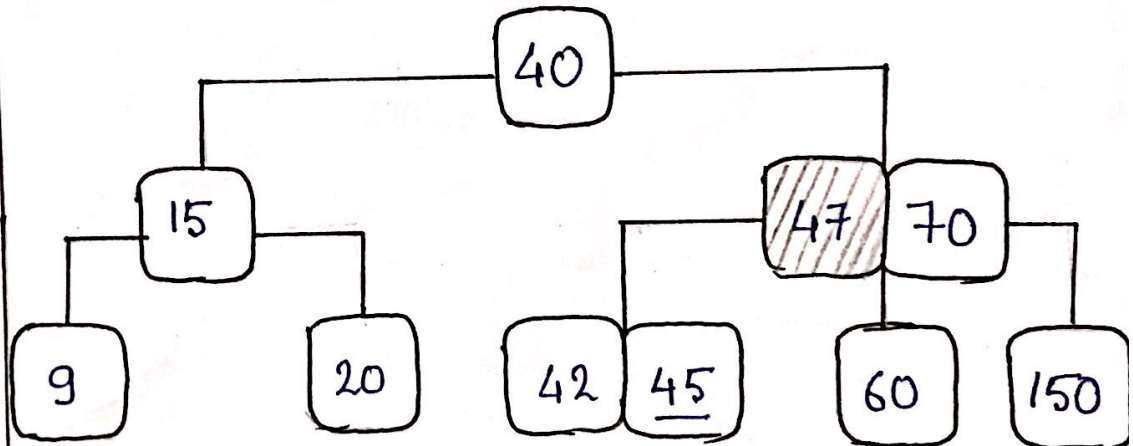
Tree.

Node inserted

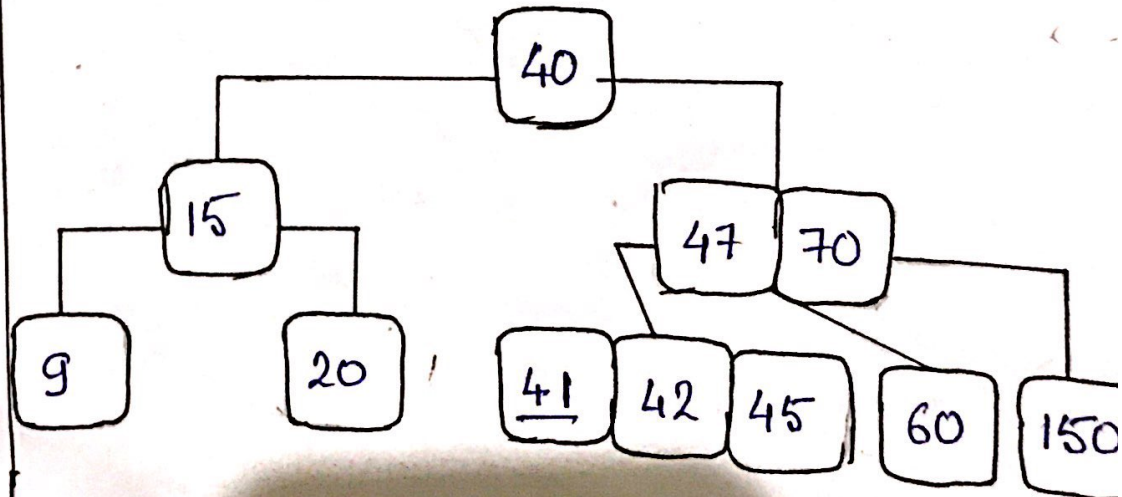
47
splitting root
using proactive
approach



45
splitting 42/47/60
using proactive
approach



41



Node inserted

Tree

46

splitting 41/42/45
using proactive
approach.

