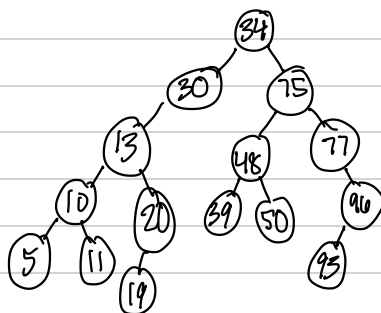
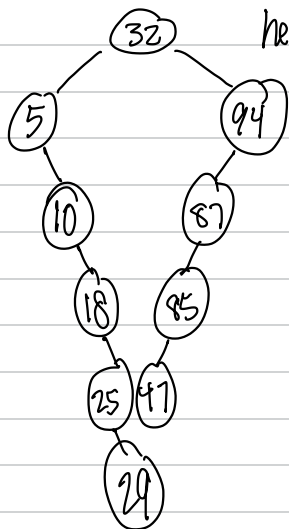


1c) height = 5 1d)



height = 4

2a) Preorder: root, left, right

node.data += left.data + (2 \* right.data)

$$68 + 21 + (2 \times 92) = 273$$

$$21 + 15 + (2 \times 54) = 144$$

$$15 + 0 + (2 \times 0) = 15$$

$$54 + 46 + (2 \times 59) = 218$$

$$46 + 36 + (2 \times 0) = 82$$

$$36 + 0 + (2 \times 37) = 110$$

$$37 + 0 + (2 \times 0) = 37$$

$$59 + 0 + (2 \times 65) = 189$$

$$65 + 0 + (2 \times 0) = 65$$

$$92 + 80 + (2 \times 97) = 360$$

$$80 + 0 + (2 \times 87) = 254$$

$$87 + 0 + (2 \times 0) = 87$$

$$97 + 93 + (2 \times 0) = 190$$

$$93 + 0 + (2 \times 0) = 93$$

→ TREE:

