

Time estimate for current problem: 10 minutes

Please copy this template and change the name to be “Group_Work_Breakout_Room#” where # is replaced by the number of your breakout room. I can keep track of progress by checking in on these documents. You may use these notes for your group in addition to code you write.

Breakout Room Number:

All Team Collaborators: David Wen, Arman Roshannai, Nicholas Marcotte

Roles:

<http://teachingcenter.wustl.edu/wp-content/uploads/2017/12/POGIL-role-cards-traditional.pdf>

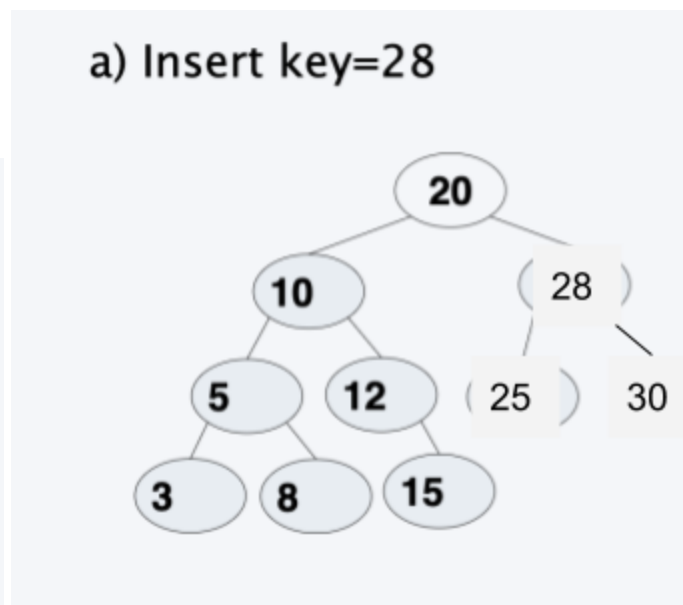
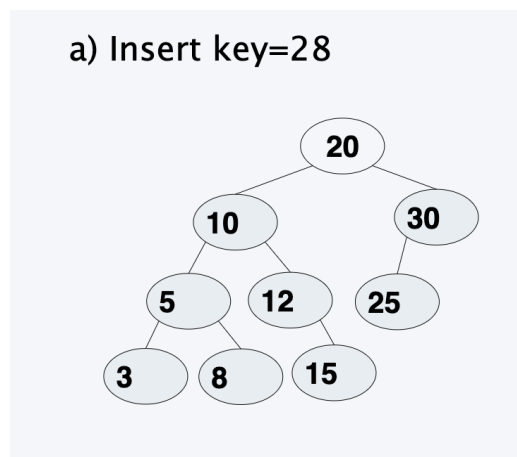
Facilitator:

Presenter:

Strategy Analyst:

Recorder:

1.

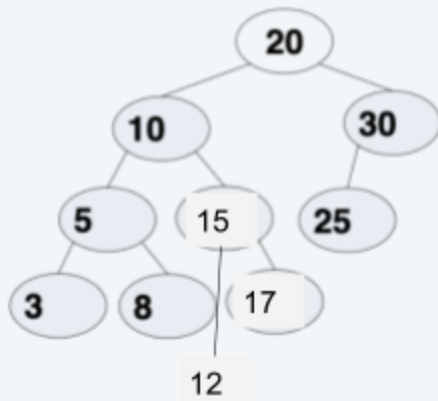


Insert 28 as right child of 25

Zig-zag: rotate left at 25, rotate right at 30

2.

b) Insert key=17

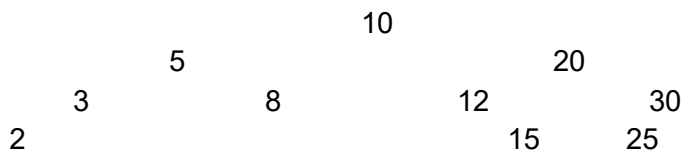
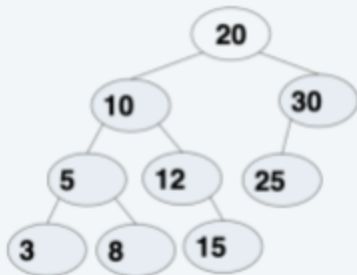


Insert as right child of 15

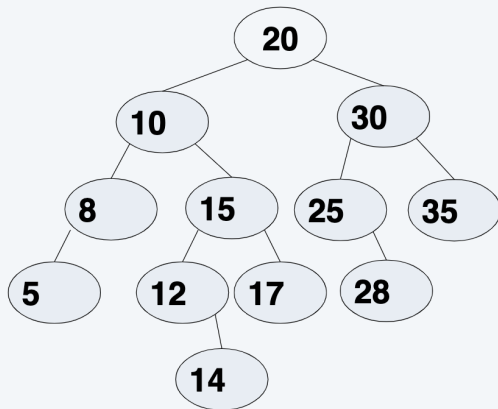
Zig-zig: rotate left on 12

3. Insert 2 as left child of 3, unbalanced node is 20, rotate right on 20

c) Insert key=2



a) Remove 8. If necessary swap with successor



Swap 8, 5; remove 8

Diff = -1

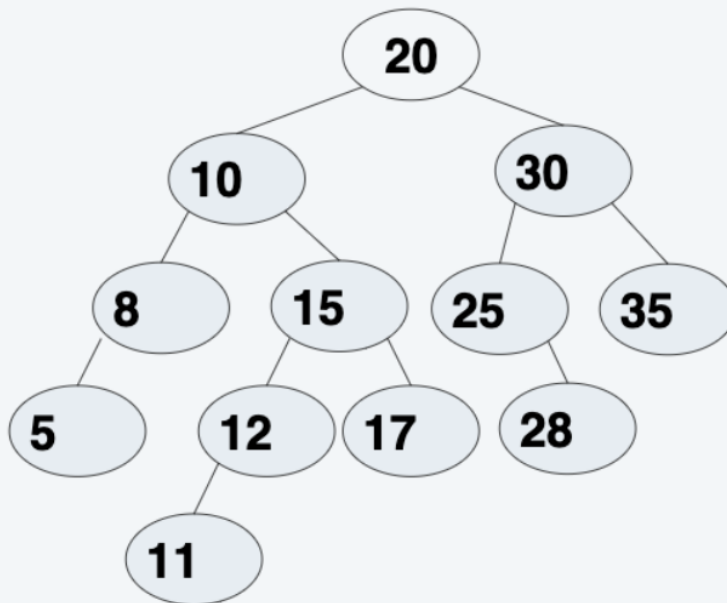
$b(10) = 2$

Zig zag

Rotate right (12,15)

Rotate left (10,12)

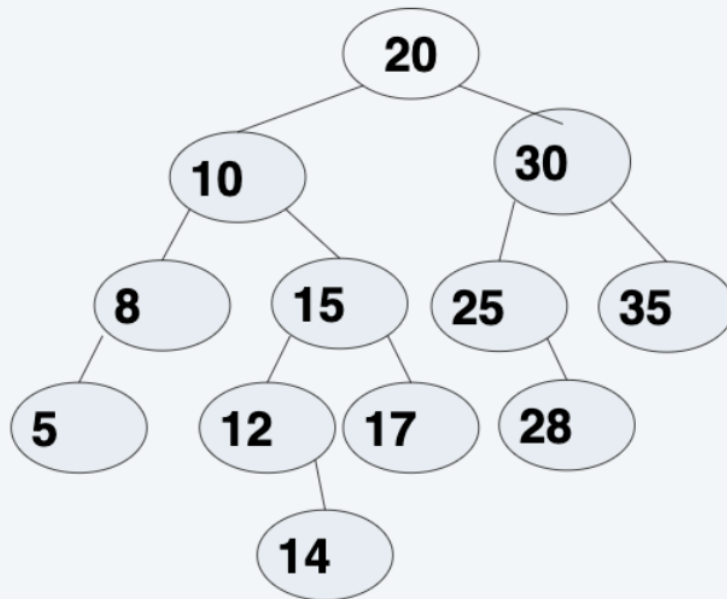
b) Remove 10. If necessary swap with successor



Swap (10, 11)

Remove (10)

c. Remove 30. If necessary swap with successor



Swap (30, 35)

Remove (30)

$b(35) == -2$

Zig zag

Rotate left (25,28)

Rotate right (30, 28)

$b(20) == -2$

Zig zag

Rotate left (10,15)

Rotate right (15,20)