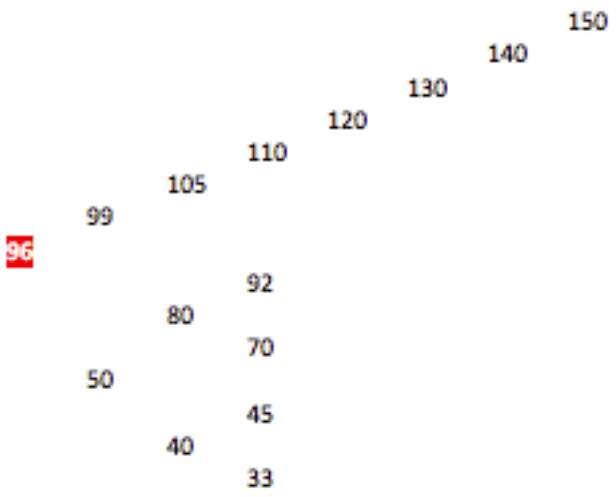
num is 15
ht is 10
---------- ----------

```
                                                                150
                                                            140
                                                        130
                                                    120
                                                110
                                            105
                                        99
                                    96
                                92
                            80
                                70
50
                                45
                            40
                                33
```

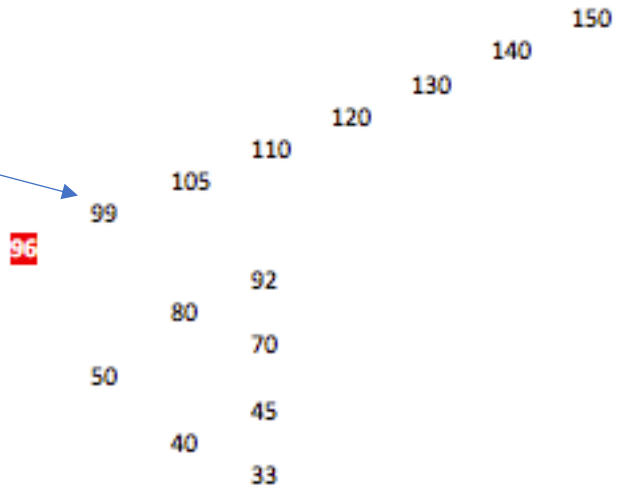
---------- ----------
>>>>>>>>> Start level: 0
Start partitioning at root 50
[50](i(7)>m(3)): (i-m-1)=3 , plvl=0
[80](i(3)>m(1)): (i-m-1)=1 , plvl=1
[92](i(1)>m(0)): (i-m-1)=0 , plvl=2
[96](i(0)==m(0)): plvl=3
rotateLeft at 92
rotateLeft at 80
rotateLeft at 50
After partitioning at root 50

```
                                                        150
                                                    140
                                                130
                                            120
                                        110
                                    105
                            99
96
                                92
                            80
                                70
                            50
                                45
                            40
                                33
```

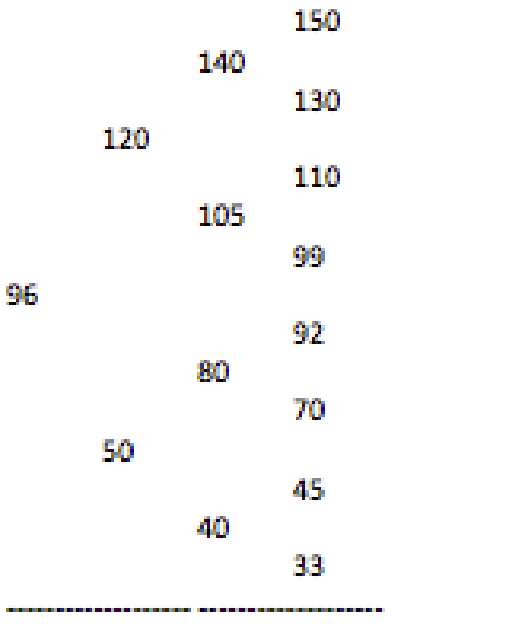
++++++++ **Start rebalance at root 50**
>>>>>>>>> Start level: 1
Start partitioning at root 50
[50](i(3)==m(3)): plvl=0
After partitioning at root 50
92
80
70
50
45
40
33
++++++++ Start rebalance at root 40
>>>>>>>>> Start level: 2
Start partitioning at root 40
[40](i(1)==m(1)): plvl=0
After partitioning at root 40
45
40
33
++++++++ Start rebalance at root 33
>>>>>>>>> Start level: 3
n < 3
>>>>>>>>> End level: 3
++++++++ End rebalance at root 33
++++++++ Start rebalance at root 45
>>>>>>>>> Start level: 3
n < 3
>>>>>>>>> End level: 3
++++++++ End rebalance at root 45
>>>>>>>>> End level: 2
++++++++ End rebalance at root 40
++++++++ Start rebalance at root 80
>>>>>>>>> Start level: 2
Start partitioning at root 80
[80](i(1)==m(1)): plvl=0
After partitioning at root 80
92
80
70
++++++++ Start rebalance at root 70
>>>>>>>>> Start level: 3
n < 3
>>>>>>>>> End level: 3
++++++++ End rebalance at root 70
++++++++ Start rebalance at root 92
>>>>>>>>> Start level: 3
n < 3
>>>>>>>>> End level: 3
++++++++ End rebalance at root 92
>>>>>>>>> End level: 2
++++++++ End rebalance at root 80
>>>>>>>>> End level: 1
++++++++ End rebalance at root 50



++++++++ Start rebalance at root 99
>>>>>>>>> Start level: 1
Start partitioning at root 99
[99](i(3)>m(0)): (i-m-1)=2 , plvl=0
  [105](i(2)>m(0)): (i-m-1)=1 , plvl=1
    [110](i(1)>m(0)): (i-m-1)=0 , plvl=2
      [120](i(0)==m(0)): plvl=3
rotateLeft at 110
rotateLeft at 105
rotateLeft at 99
After partitioning at root 99
                    150
              140
        130
120
                    110
              105
        99
++++++++ Start rebalance at root 99
>>>>>>>>> Start level: 2
Start partitioning at root 99
[99](i(1)>m(0)): (i-m-1)=0 , plvl=0
  [105](i(0)==m(0)): plvl=1
rotateLeft at 99
After partitioning at root 99
          110
105
          99
++++++++ Start rebalance at root 99
>>>>>>>>> Start level: 3
   n < 3
>>>>>>>>> End level: 3
++++++++ End rebalance at root 99
++++++++ Start rebalance at root 110
>>>>>>>>> Start level: 3
   n < 3
>>>>>>>>> End level: 3
++++++++ End rebalance at root 110
>>>>>>>>> End level: 2
++++++++ End rebalance at root 99
++++++++ Start rebalance at root 130
>>>>>>>>> Start level: 2
Start partitioning at root 130
[130](i(1)>m(0)): (i-m-1)=0 , plvl=0
  [140](i(0)==m(0)): plvl=1
rotateLeft at 130
After partitioning at root 130
          150
140
          130
++++++++ Start rebalance at root 130
>>>>>>>>> Start level: 3
   n < 3
>>>>>>>>> End level: 3
++++++++ End rebalance at root 130
++++++++ Start rebalance at root 150
>>>>>>>>> Start level: 3
   n < 3
>>>>>>>>> End level: 3
++++++++ End rebalance at root 150
>>>>>>>>> End level: 2
++++++++ End rebalance at root 130
>>>>>>>>> End level: 1
++++++++ End rebalance at root 99
>>>>>>>>> End level: 0



---------- After rebalance ----------



---------- After rebalance ----------
150
140
130
120
110
105
99
96
92
80
70
50
45
40
33
---------- ----------