

Alp Tugrul Ağcaklı

21801799

Section - 3

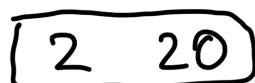
Q1

a.)

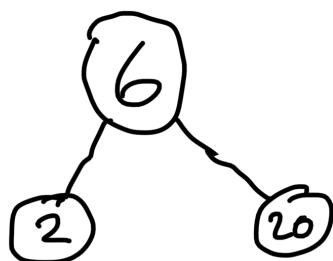
Insert 2



Insert 20



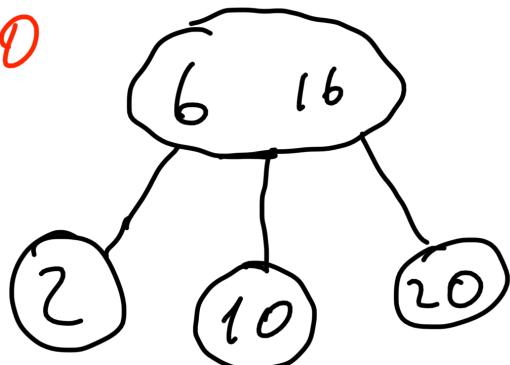
Insert 6



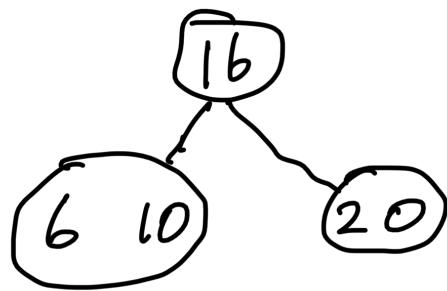
Insert 16



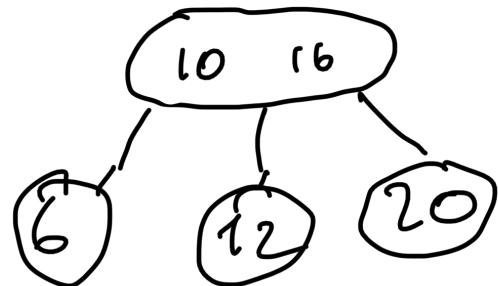
Insert 10



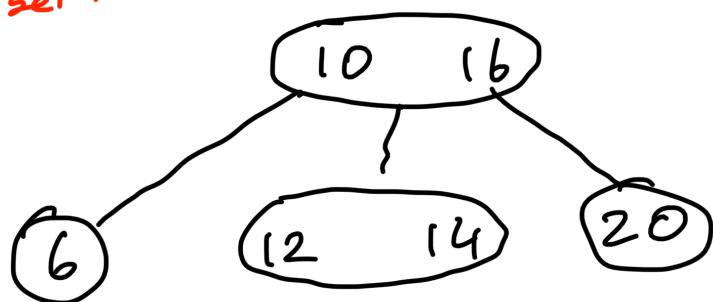
Delete 2



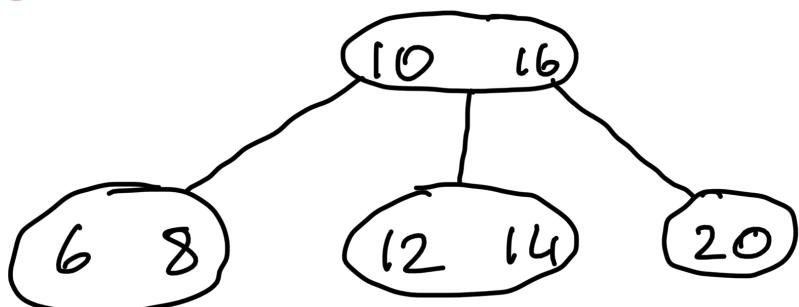
Insert 12



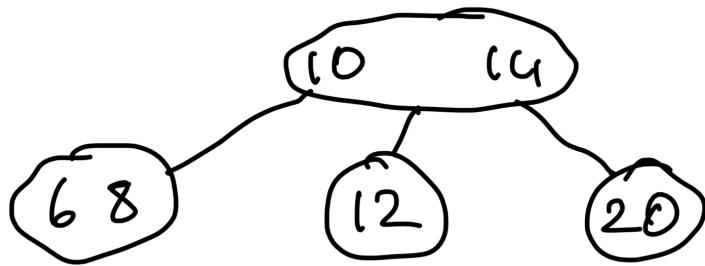
Insert 14



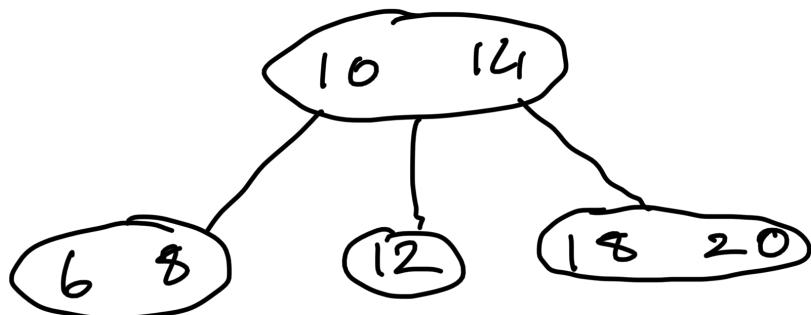
Insert 8



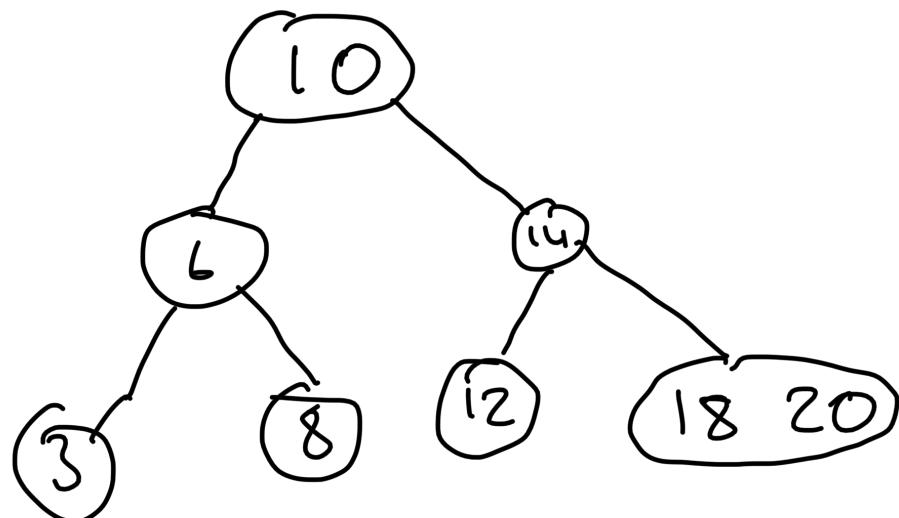
Delete 16



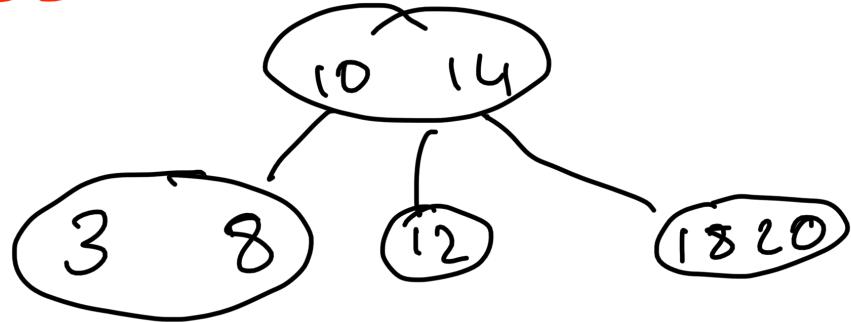
Insert 18



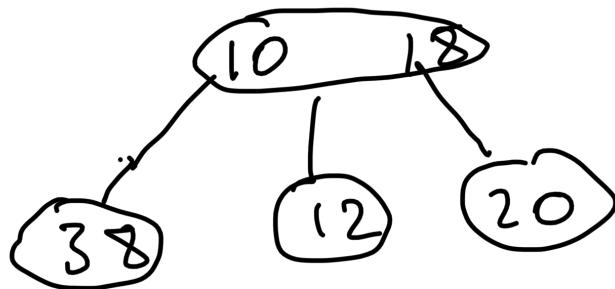
Insert 3



Delete 6



Delete 14



b-)

Insert 2



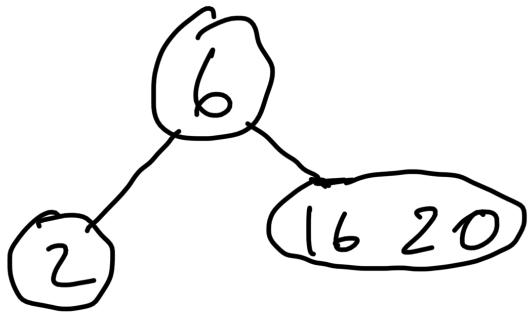
Insert 20



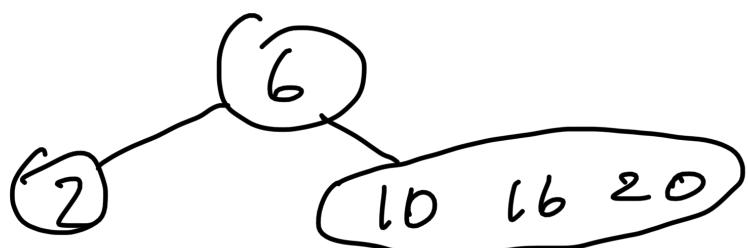
Insert 6



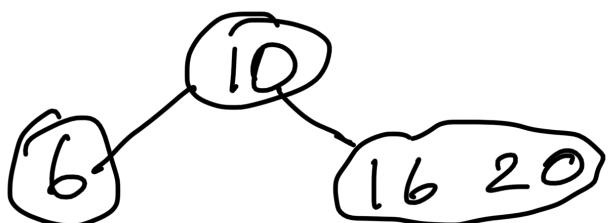
Insert 16



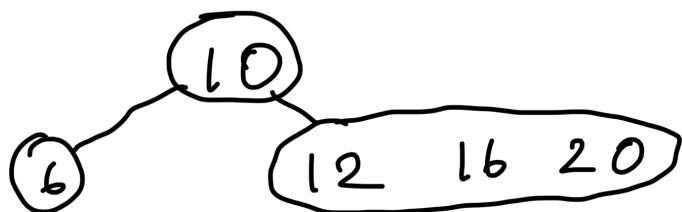
Insert 10



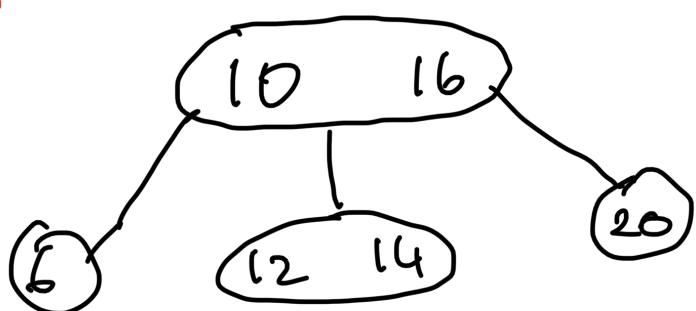
Delete 2



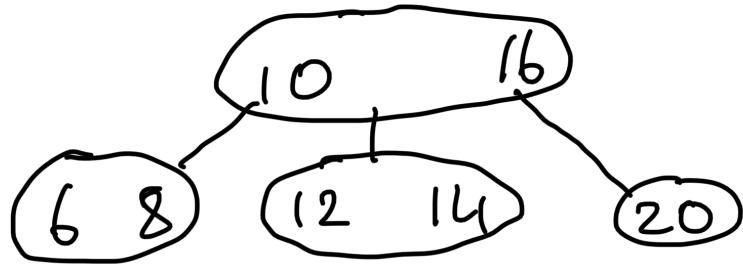
Insert 12



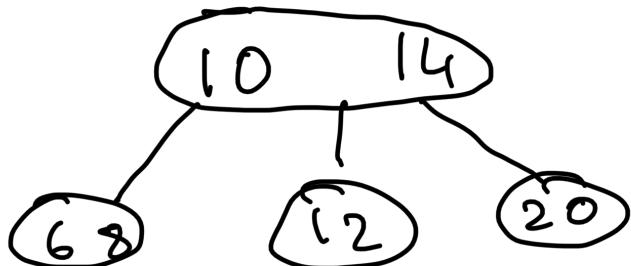
Insert 14



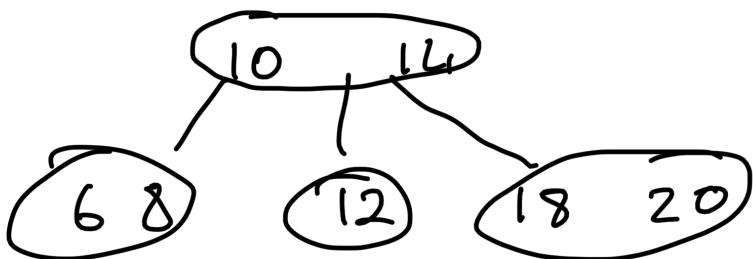
Insert 8



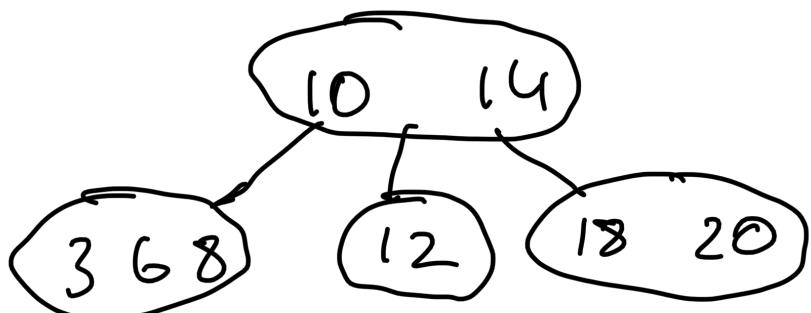
Delete 16



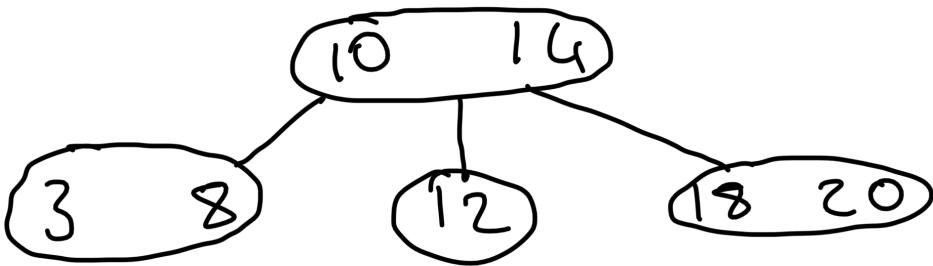
Insert 18



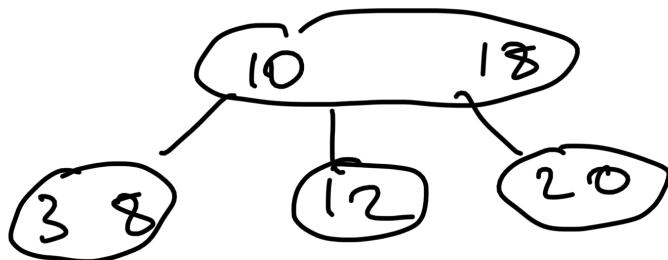
Insert 3



Delete 6



Delete 14



Q₂

a)

0	26
1	
2	54
3	
4	17
5	69
6	45
7	58
8	32
9	60
10	
11	
12	64

Insert 45 $45\% 13 = 6$

Insert 64 $64\% 13 = 12$

Insert 54 $54\% 13 = 2$

Insert 17 $17\% 13 = 4$

Insert 69 $69\% 13 = 4$ is full
 $4+1=5$

Insert 58 $58\% 13 = 6$ is full
 $6+1=7$

Insert 32 $32\% 13 = 6$
 $6+1=7$ is full

$$7+1=8$$

Insert 60 $60\% 13 = 8$ is full
 $8+1=9$

Insert 26 $26\% 13 = 0$

b-)

0	26
1	
2	54
3	
4	17
5	69
6	45
7	58
8	60
9	
10	32
11	
12	64

Insert 45 6

Insert 64 12

Insert 54 2
Insert 17 4

Insert 69 4 full
 $4 + 1^2 = 5$

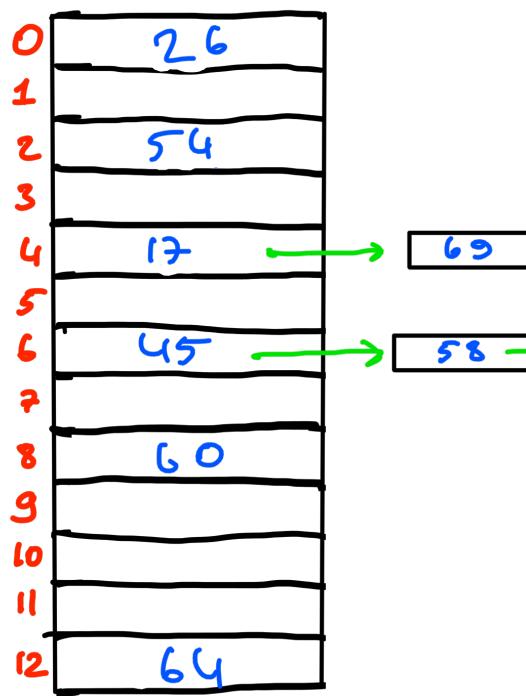
Insert 58 6 full
 $6 + 1^2 = 7$

Insert 32 6 full
 $6 + 1^2 > 7$ full
 $6 + 2^2 = 10$

Insert 60 8

Insert 26 0

(c)



Insert 45 6

Insert 64 12

Insert 54 2

Insert 17 4

Insert 69 4

Insert 58 6

Insert 32 6

Insert 60 8

Insert 26 0