

Question 1 :-

a) - AVL Tree :-

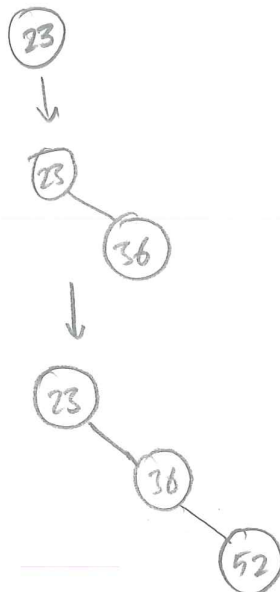
Insertion :-

Page 1

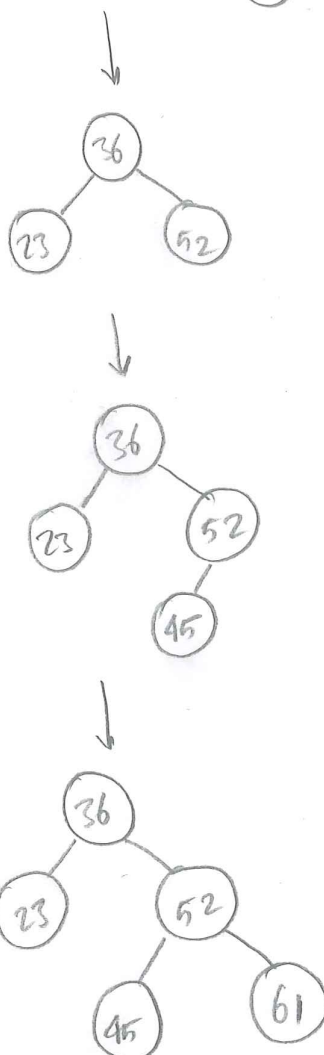
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21402827

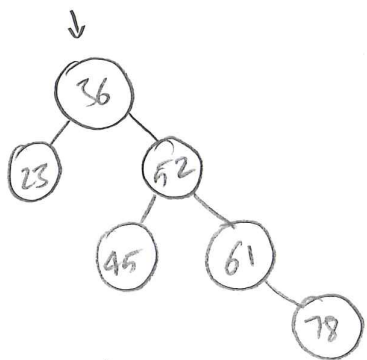
Sec - 3



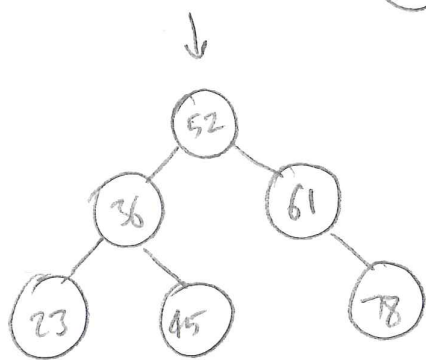
Before rotation



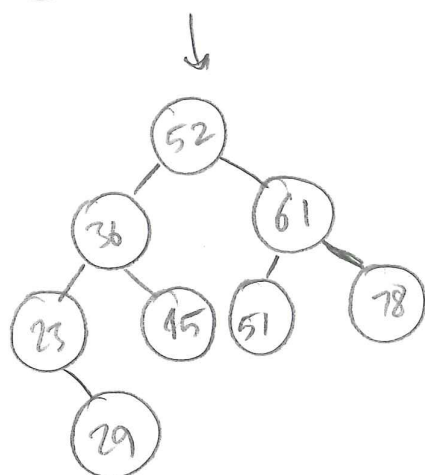
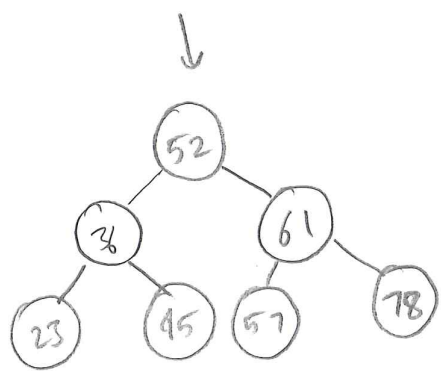
After rotation



Before rotation



After rotation



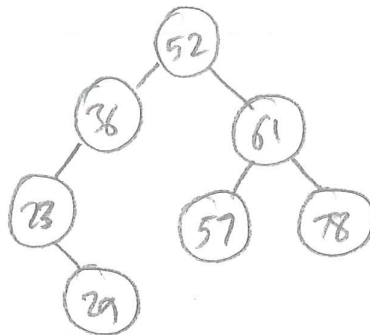
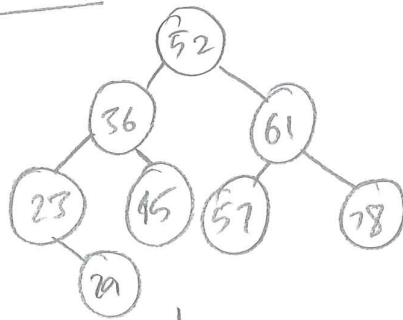
Deletion :-

Page 3

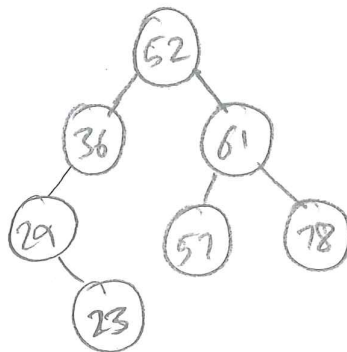
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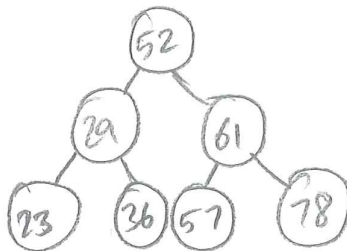
Sec -3



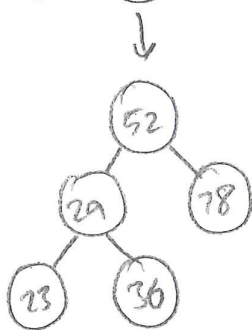
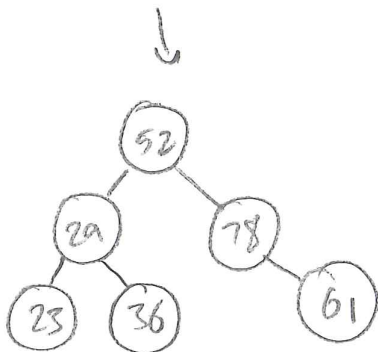
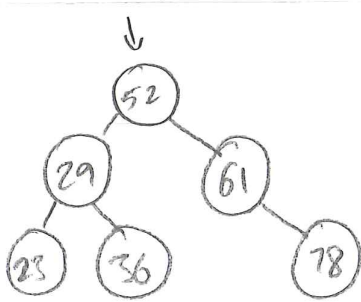
Before rotation



1st rotation

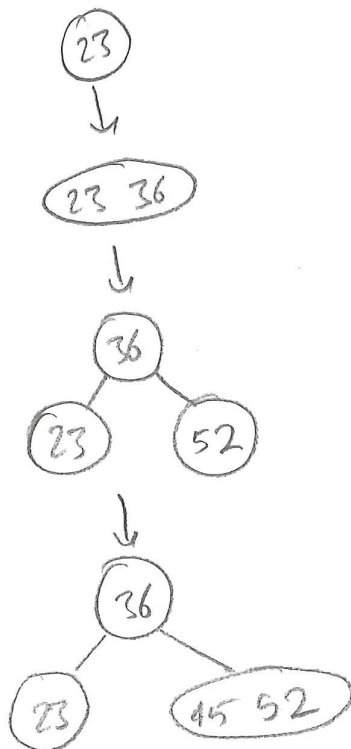


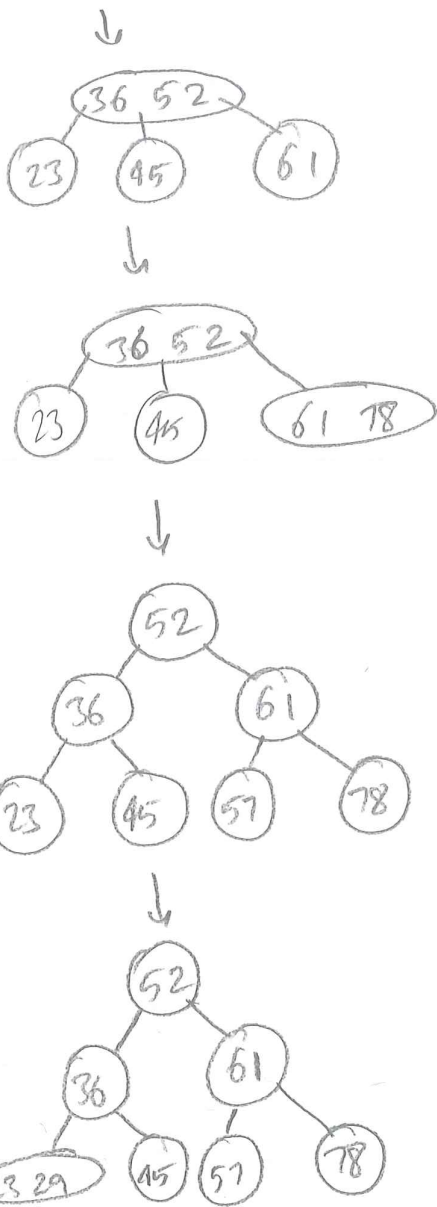
2nd rotation



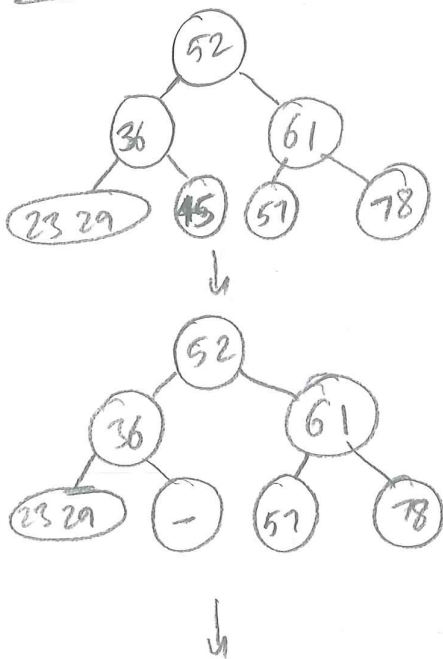
b) - 2-3 Tree :-

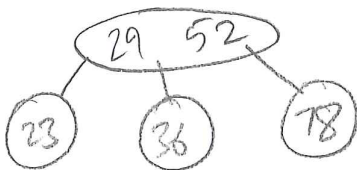
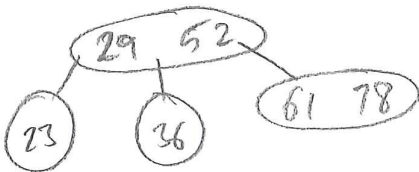
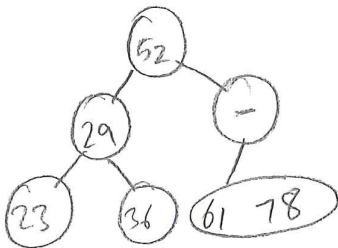
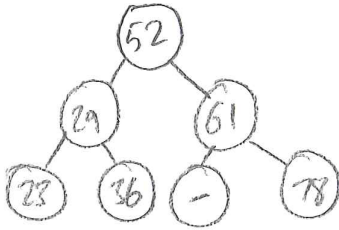
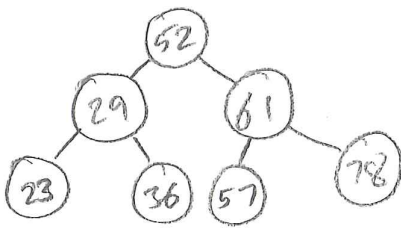
Insertion :-





Deletion:-

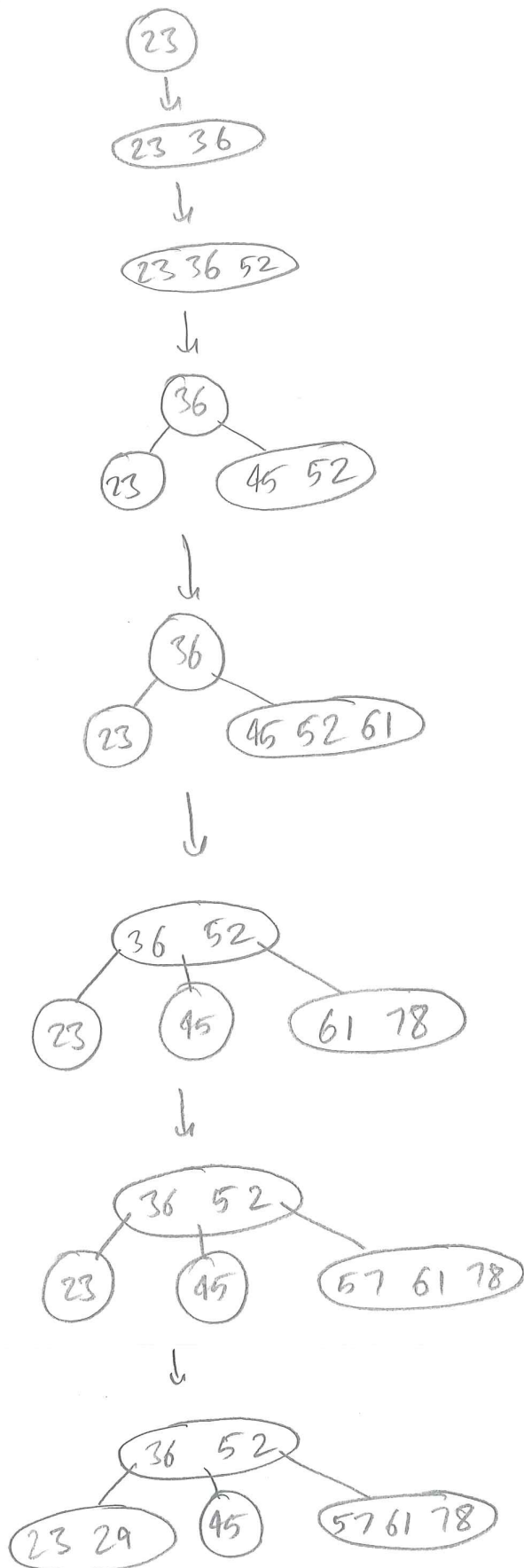




c)- 2-3-4 Trees :-

Insertion:-

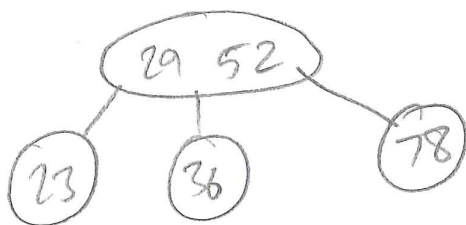
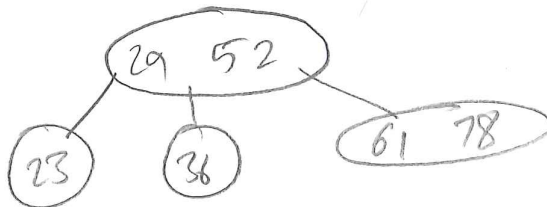
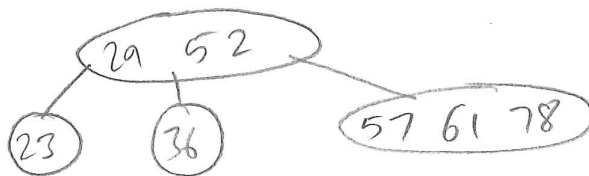
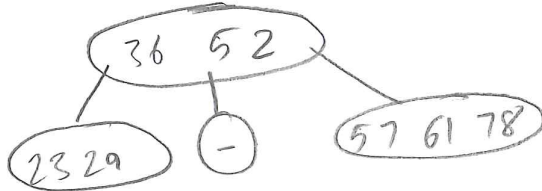
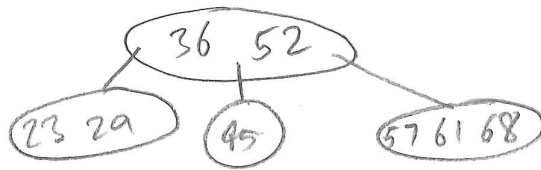
Page 7
Muhammad Osman
21402827
sec -3



Deletion :-

Page 8

Muhammad Usman
21402827
Sec-3



Question 2:-

a)- Linear:-

0	13
1	25
2	15
3	28
4	24
5	
6	
7	
8	
9	9
10	
11	11
12	12

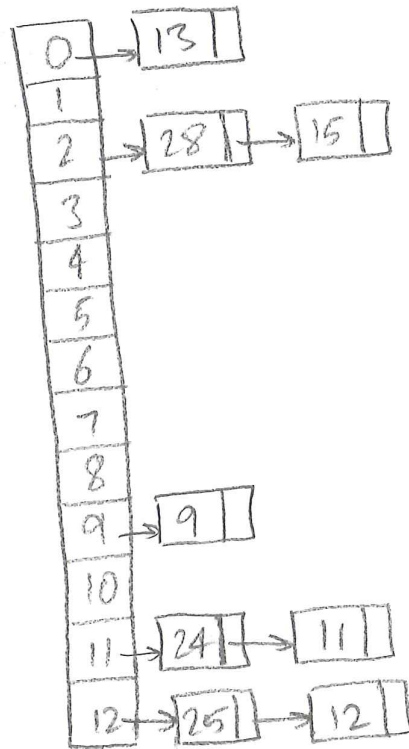
b)- Quadratic:-

0	13
1	
2	15
3	28
4	
5	
6	
7	24
8	25
9	9
10	
11	11
12	12

Page 9

Muhammad Usman
21402927
Sec-3

c) - Separate Chaining:-



Page 10

Muhammad Usman

21402827

Sec - 3