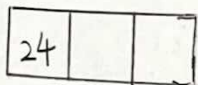
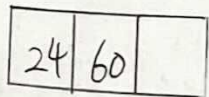


Problem 1

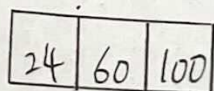
After insertion of 24:



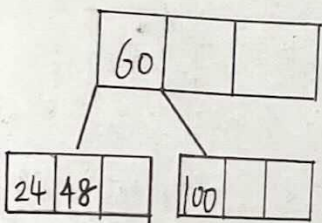
After insertion of 60:



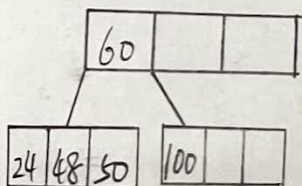
After insertion of 100:



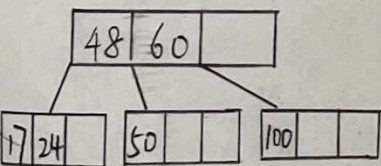
After insertion of 48:



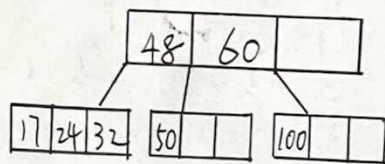
After insertion of 50:



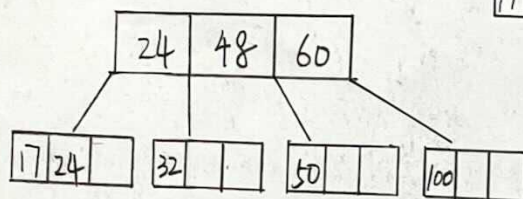
After insertion of 17:



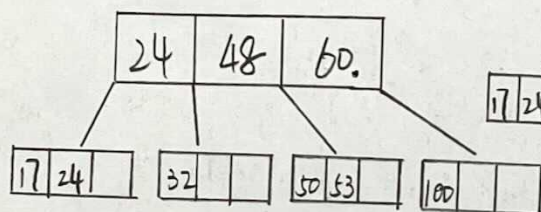
After insertion of 32:



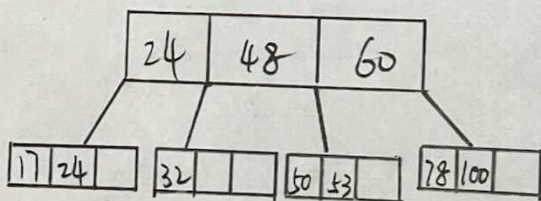
After insertion of 24:



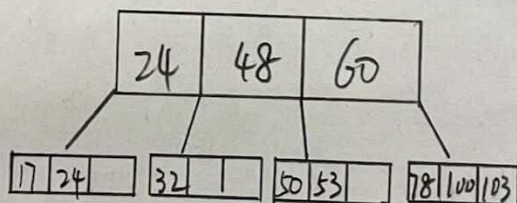
After insertion of 53:



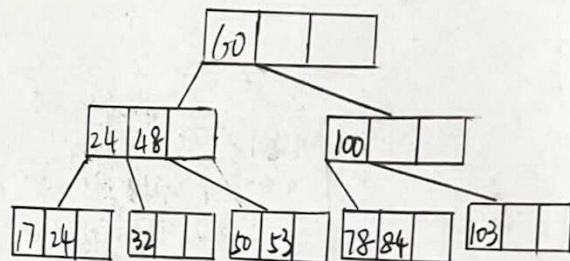
After insertion of 78:



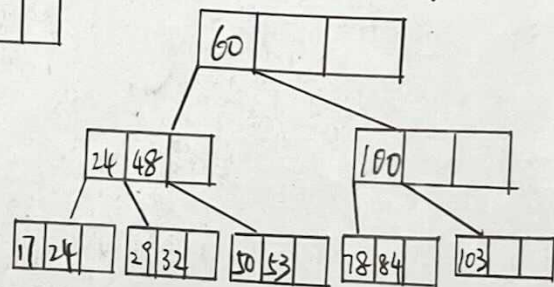
After insertion of 103:



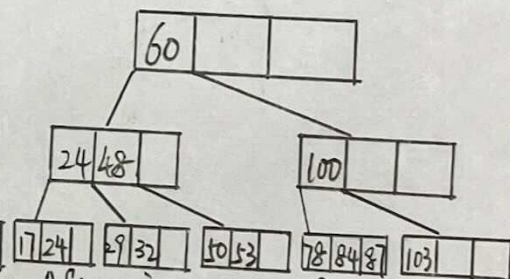
After insertion of 84:



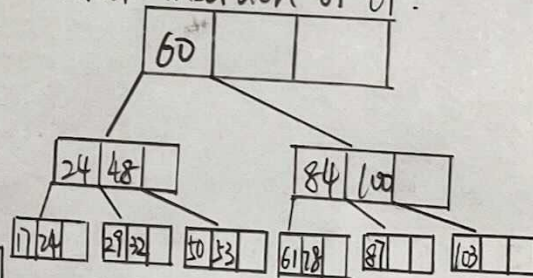
After insertion of 29:



After insertion of 87:

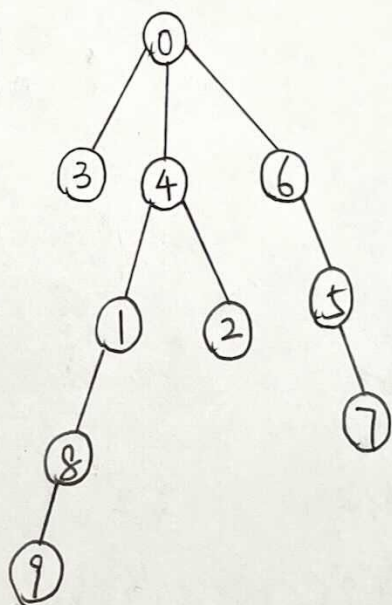


After insertion of 61:



Problem 2

(1)
(a)



(b) $[0, 3, 4, 6, 1, 2, 5, 8, 7, 9]$

	Initially	1st	2nd	3rd	4th	5th	6th
frontierQueue	0	3, 4, 6	4, 6	6, 1, 2	1, 2, 5	2, 5, 8	5, 8
discoveredQueue	0	0, 3, 4, 6	0, 3, 4, 6	0, 3, 4, 6, 1, 2	0, 3, 4, 6, 1, 2, 5	0, 3, 4, 6, 1, 2, 5, 8	0, 3, 4, 6, 1, 2, 5, 8
currentV	-	0	3	4	6	1	2
	7th	8th	9th	10th			
frontierQueue	8, 7	7, 9	9	-			

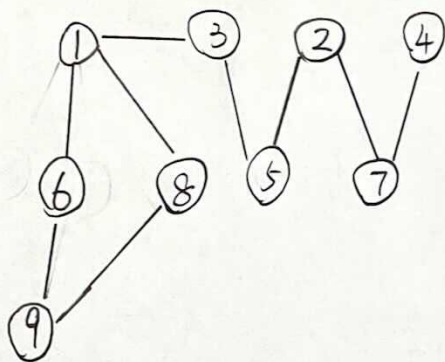
discoveredQueue	0, 3, 4, 6, 1, 2, 5, 8, 7	0, 3, 4, 6, 1, 2, 5, 8, 7, 9	0, 3, 4, 6, 1, 2, 5, 8, 7, 9	0, 3, 4, 6, 1, 2, 5, 8, 7, 9
currentV	5	8	7	9

(c) $[0, 6, 5, 7, 4, 2, 1, 8, 9, 3]$

	Initially	1st	2nd	3rd	4th	5th	6th
current V	-	0	6	5	7	4	2
stack	0	6, 4, 3	5, 4, 3	7, 4, 3	4, 3	2, 1, 3	1, 3
visitedSet	-	0	0, 6	0, 6, 5	0, 6, 5, 7	0, 6, 5, 7, 4	0, 6, 5, 7, 4, 2
	7th	8th		9th		10th	
	1	8		9		3	
	8, 3	8, 3		6, 3		-	
	0, 6, 5, 7, 4, 2, 1	0, 6, 5, 7, 4, 2, 1, 9		0, 6, 5, 7, 4, 2, 1, 8, 9		0, 6, 5, 7, 4, 2, 1, 8, 9, 3	

(2)

(a)



(b) [8, 1, 9, 3, 6, 5, 2, 7, 4]

Initially

1st2nd3rd4th5th

frontierQueue

8

1, 9

9, 3, 6

3, 6

6, 5

5, 2

discoveredQueue

8

8, 1, 9

8, 1, 9, 3, 6

8, 1, 9, 3, 6

8, 1, 9, 3, 6, 5

8, 1, 9, 3, 6, 5, 2

current V

—

8

1

9

3

6

6th7th8th9th

2, 7

7, 4

4

—

8, 1, 9, 3, 6, 5, 2, 7

8, 1, 9, 3, 6, 5, 2, 7, 4

8, 1, 9, 3, 6, 5, 2, 7, 4

8, 1, 9, 3, 6, 5, 2, 7, 4

(c) [6, 9, 8, 1, 3, 5, 2, 7, 4]

Initially

1st2nd3rd4th5th

current V

—

6

9

8

1

3

stack

6

9, 1

8, 1

1

3

5

visitedSet

—

6

6, 9

6, 9, 8

6, 9, 8, 1

6, 9, 8, 1, 3

6th7th8th9th

5

2

7

4

2

7, 7

4

—

6, 9, 8, 1, 3, 5

6, 9, 8, 1, 3, 5, 2

6, 9, 8, 1, 3, 5, 2, 7

6, 9, 8, 1, 3, 5, 2, 7