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ID: 2020-1-60-196

CSE207

Final

Ans to the Q no 1(A):

P₅ 2 → 5

(5)

_____ 0 _____

P₅ 2 → 3

(3)
(5)

_____ 0 _____

P₅ 9 → 4

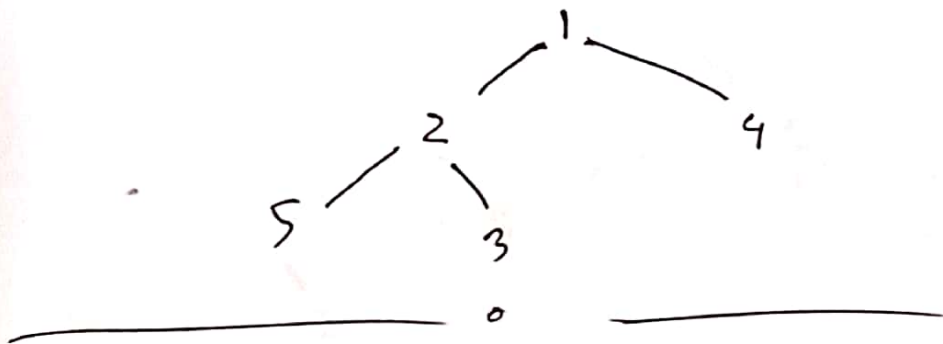
(3)
(5) (4)

_____ 0 _____

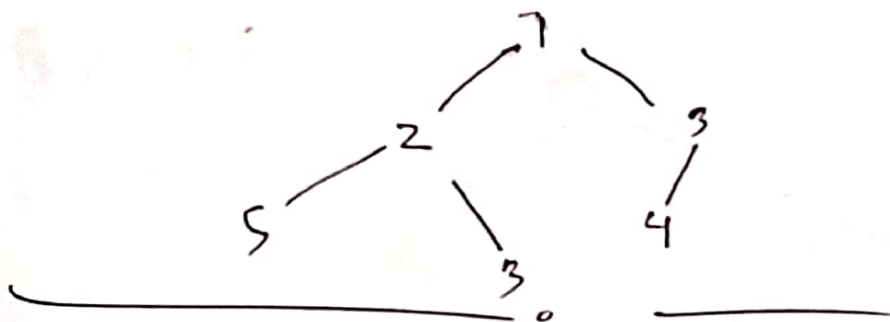
P₅ 4 → 2

2
3 4
5

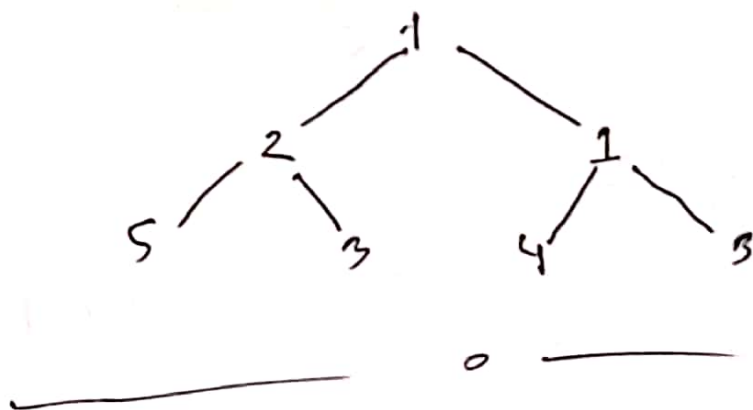
$P_5 \ 5 \rightarrow 1$



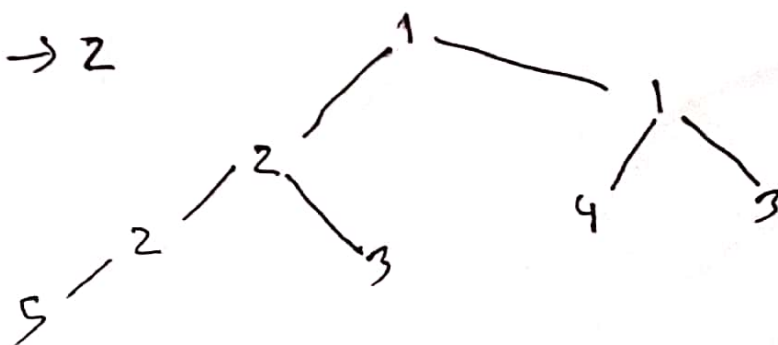
$P_5 \ 6 \rightarrow 3$



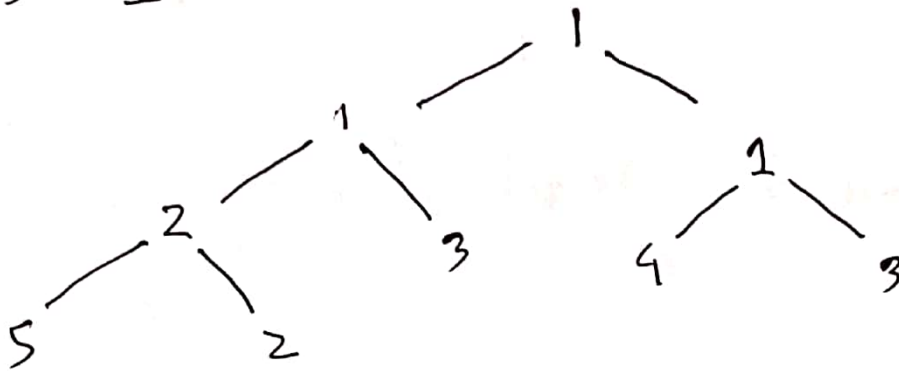
$P_5 \ 7 \rightarrow 1$



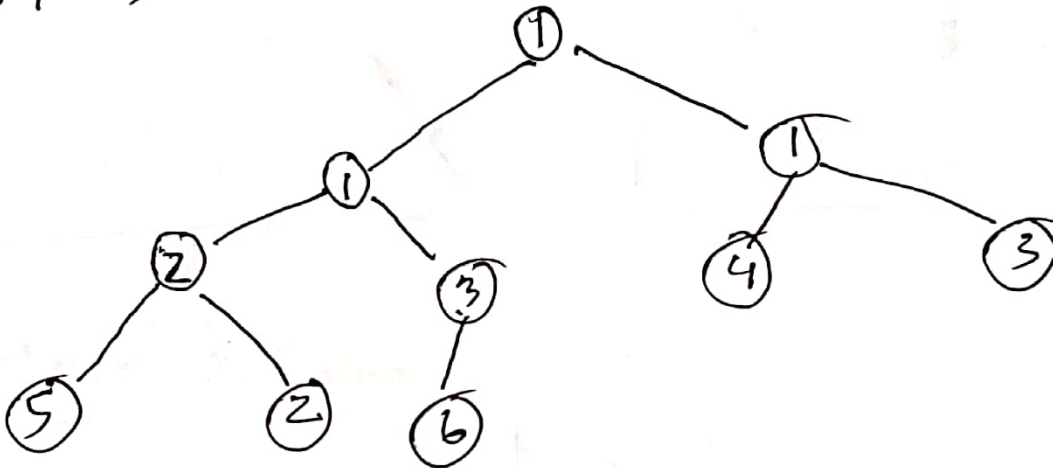
$P_5 \ 8 \rightarrow 2$



Ps 9 \rightarrow 1



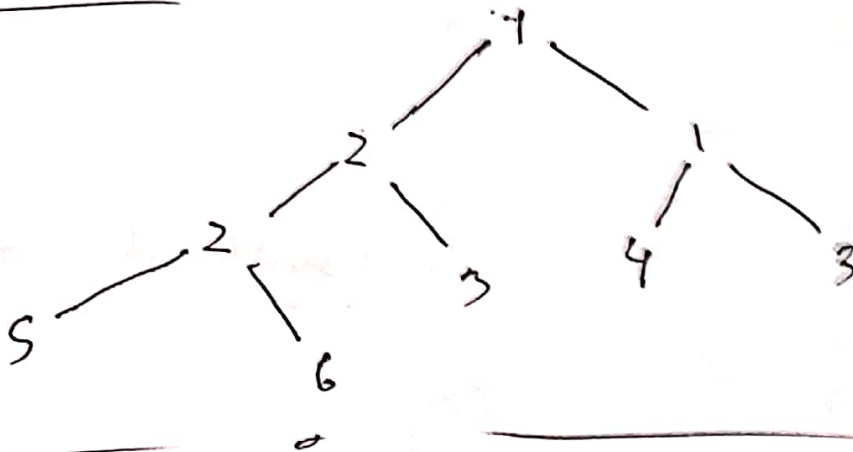
Ps 10 \rightarrow 6



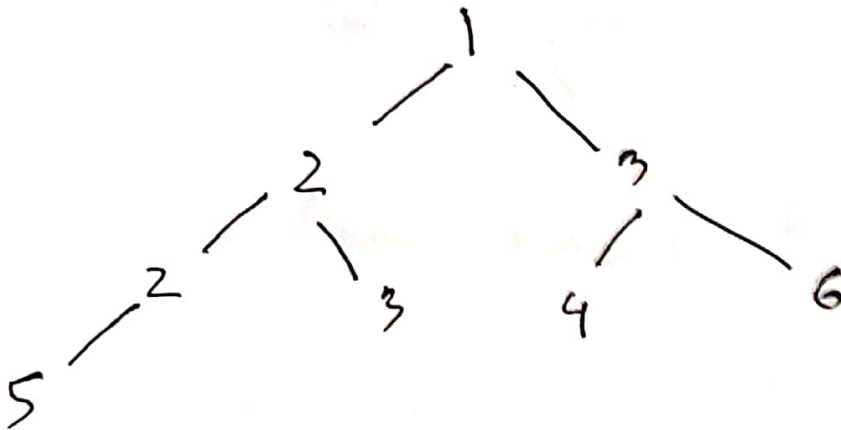
Ans to the Q no 1 (B):

Now delete the top of the heap 4 time

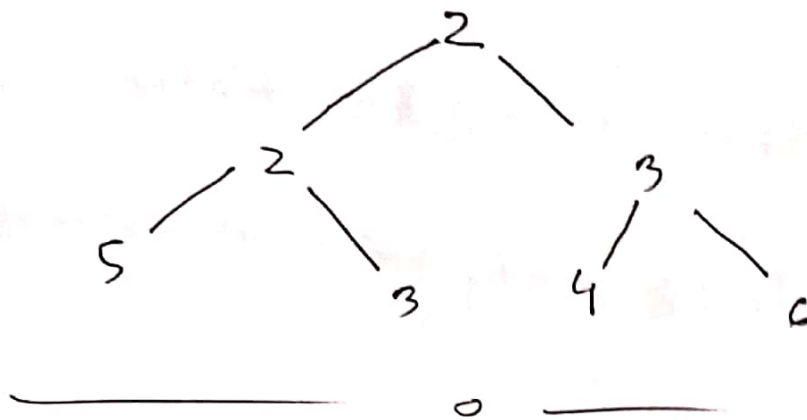
delete 1 time:



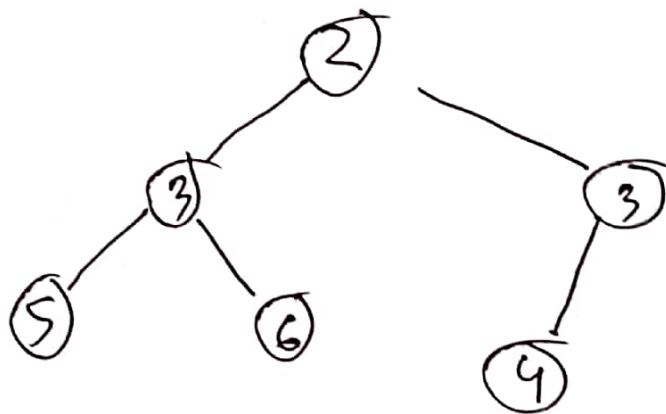
delete 2nd time:



Delete 3rd time:



Delete 4th time:



this is the final rebuild heap

Ans to the Q no 2:

When we visit adjacent node in a
anticlockwise and the node travers
is:

$A \rightarrow B \rightarrow C \rightarrow D \rightarrow K \rightarrow E \rightarrow H \rightarrow J$

Ans to the Q. no 3!

Here the size of the table is 11

the items are 74, 924, 83, 113, 5

$$74 \% 11 = 8$$

$$924 \% 11 = 0$$

$$83 \% 11 = 6$$

$$113 \% 11 = 3$$

$$5 \% 11 = 5$$

∴ Hash table position is

0 1 2 3										
0	1	2	3	4	5	6	6	8	9	10
924			113		5	83		74		

← Position

← Value

Now we have to search for 65 and 76

$$65 \neq 11 = 10$$

$$76 \neq 11 = 10$$

but

0	1	2	3	4	5	6	7	8	9	10
24			113		5	83		74		Null

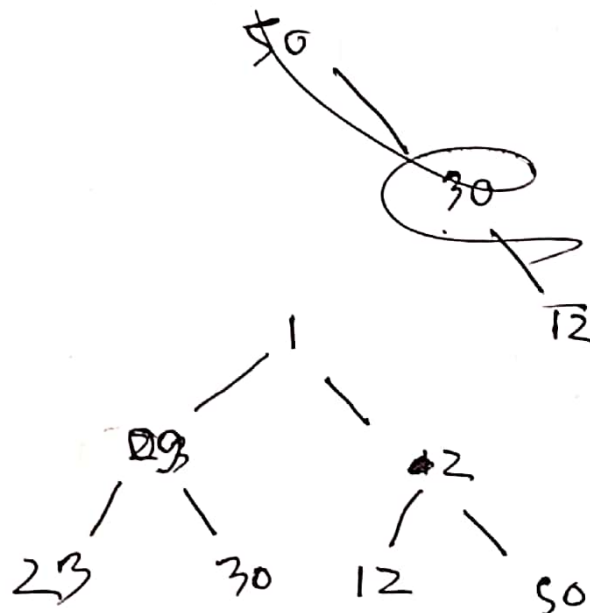
From the array we can see the index 10 is Null

Now for

Ans to the Q no 400

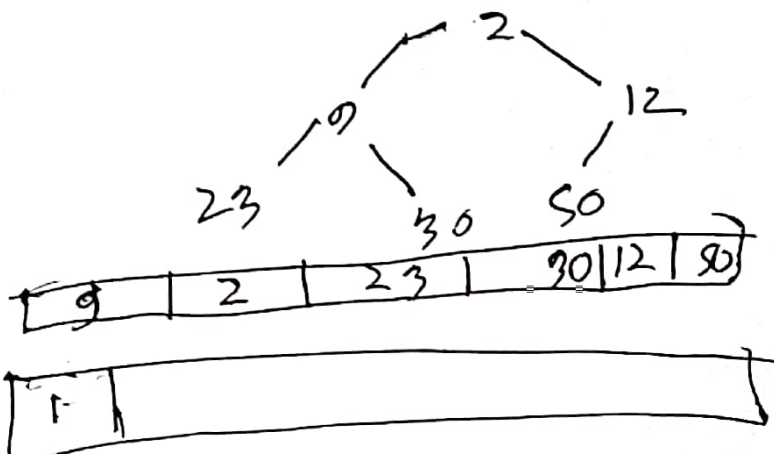
Given Integers array is $[1, 23, 12, 9, 30, 2, 50]$

Build a ~~min~~ heap

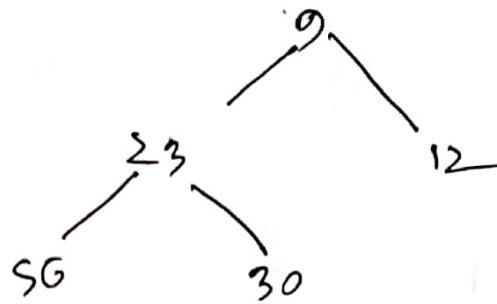


Now

~~Step 1:~~

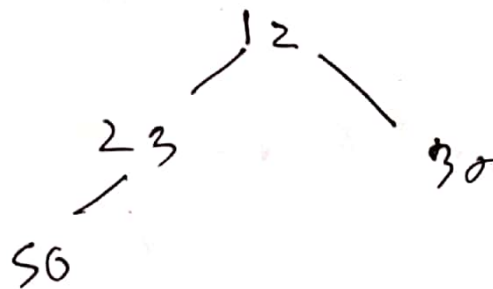


Step 2:



9	23	12	56	30
1	2			

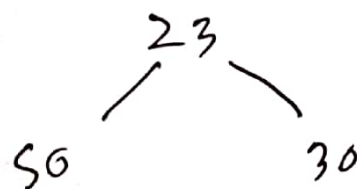
Step 3:



12	23	30	56
----	----	----	----

1	2	9
---	---	---

Step 4:



23	56	30
----	----	----

1	2	9	12
---	---	---	----

Step 5:

3rd
50

30	50
----	----

1	2	9	12	23
---	---	---	----	----

Step 6:

50

1, 2, 9, 12, 23, 30

finally Array

1	2	9	12	23	30	50
---	---	---	----	----	----	----

Ans to the Q no 5!

```
void FindoutDeg (list <int> adjlist, int n)
```

```
{  
    int* out = new int[n];
```

```
    list <list <int> ;
```

```
    int i = 0 ;
```

```
    for (n list = adjlist.begin();
```

```
        n list != adjlist.end();  
        n list++)
```

```
    {  
        list <int> lst = *n list;
```

```
        out[i] = lst.size();
```

```
    }
```

```
cout << out;
```

```
    for (int j = 0; j < n; j++)
```

```
    {  
        cout << k; }  
}
```