

# Data Structure 2018

## Lab 09

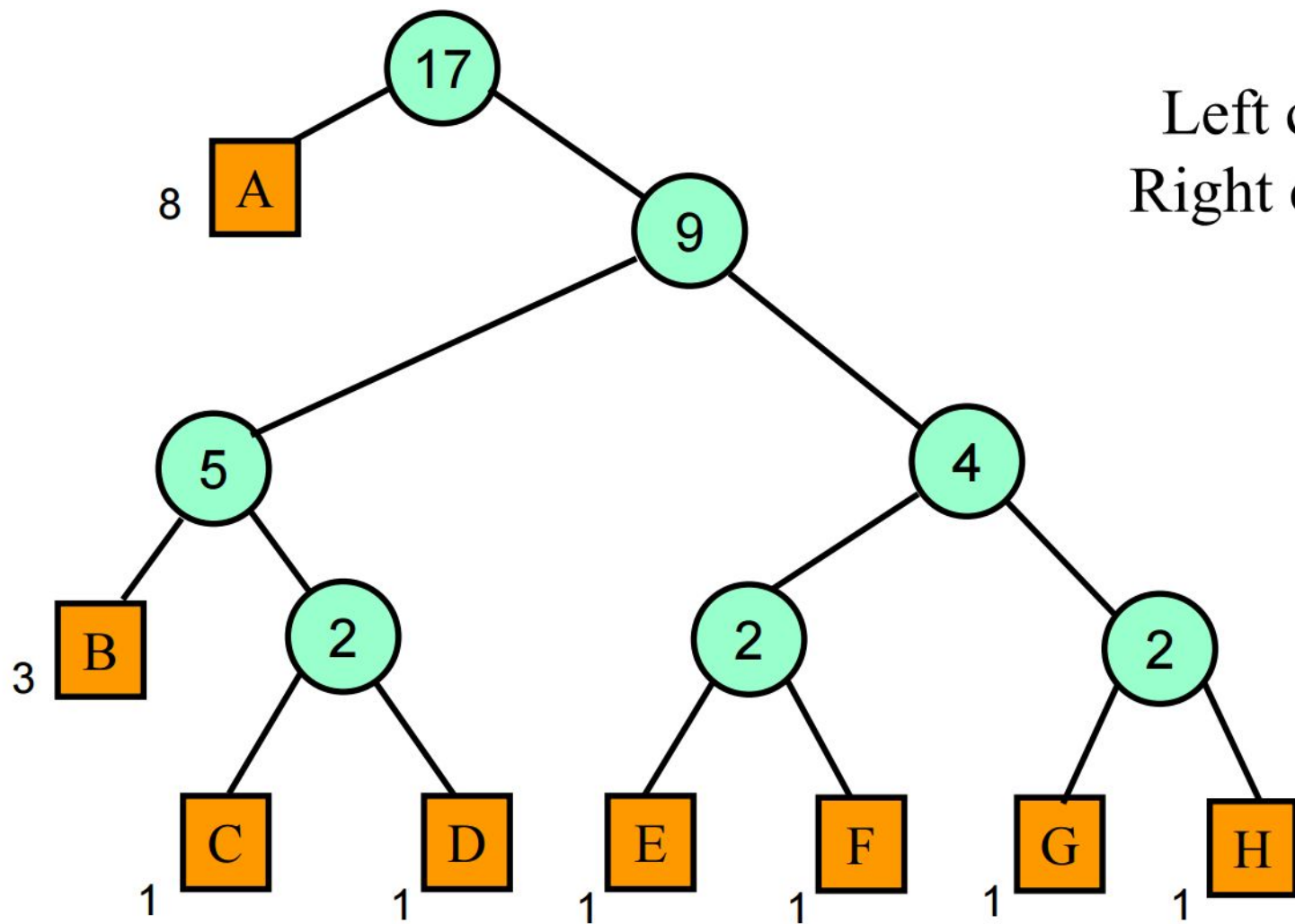
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# Today's task

- Implement your own min heap
- Compute the character frequencies
- Insert the frequencies into a min heap(You can not use Java's PriorityQueue)
- Repeat
  - Delete the two minimum elements,  $f_1$  and  $f_2$  from the heap
  - Insert  $f_1+f_2$  into the heap
- Complexity:  $O(n \log n)$

# For Today's task

- Use eclipse or other IDE
- Create your MYhuffman.java file
- Submit your .java file in the ETL
- Print out your name in the first line



Left child – 0  
Right child – 1

# Expected output

SYMBOL	FREQ	HUFFMANCODE
1	36	0
2	18	110
3	12	100
4	9	1110
5	7	1011
6	6	1010
7	5	11111
8	4	11110

Your output may not match exactly same