

Final exam:

All the material excluding (Inheritance, Polymorphism + design patterns, Exception, Streams)

- Proper binary tree:

$$nE = nI + 1$$

number of edges = number of nodes - 1

$$nI * 2 + nE * 0 = nE + nI - 1 \Rightarrow nE = nI + 1$$

- Binary Search Tree:

- LeetCode 83:

1 --- 1 --- 2 --- 2 --- 4

Set:

1

- LeetCode 234:

1 --- 2 --- 2 --- 1

slow

fast

1 --- 2 --- 5 --- 2 --- 1

slow