

◆ Given node i , we can find:

◆ $\text{Parent}(i) = \lfloor (i - 1) / 2 \rfloor$

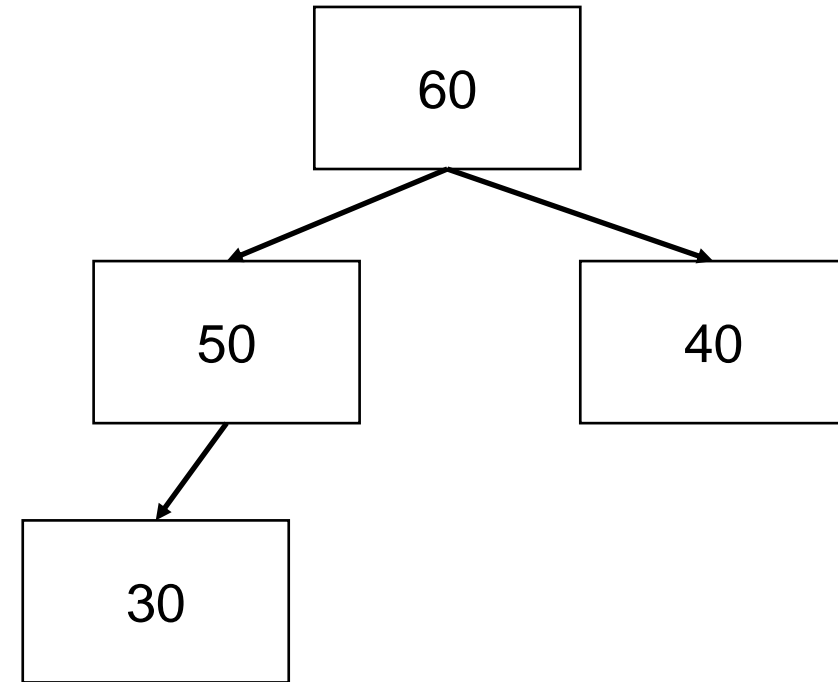
◆ $\text{Left}(i) = 2i + 1$

◆ $\text{Right}(i) = 2i + 2$

$$A[\text{Parent}(i)] \geq A[i]$$

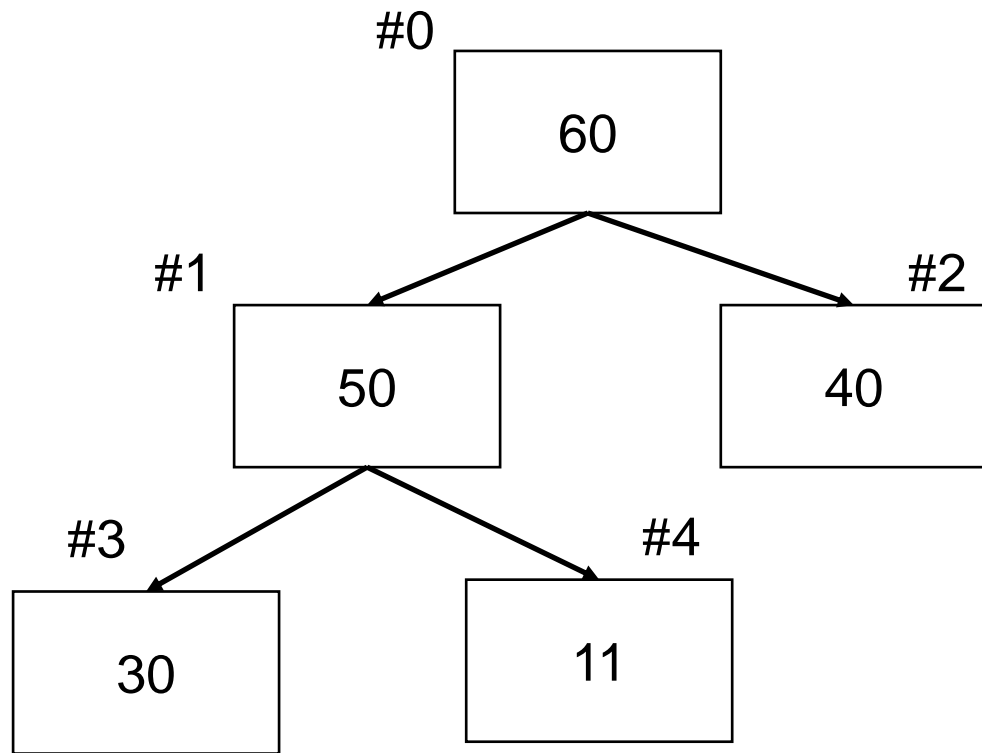
Insertion:

From left to the right, from top to down



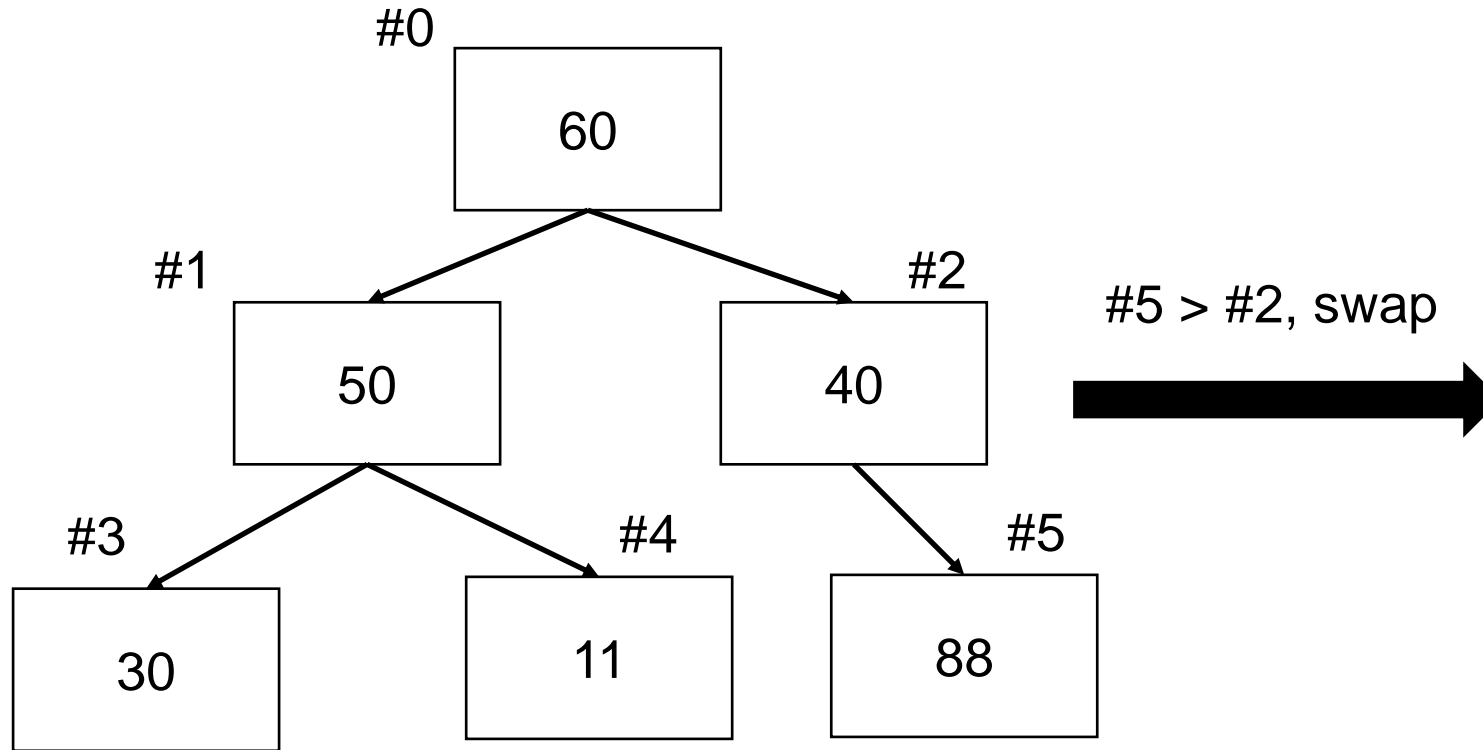
To insert: 11, 88, 22, 77

	0	1	2	3	4	5	6	7
H	60	50	40	30	-	-	-	-



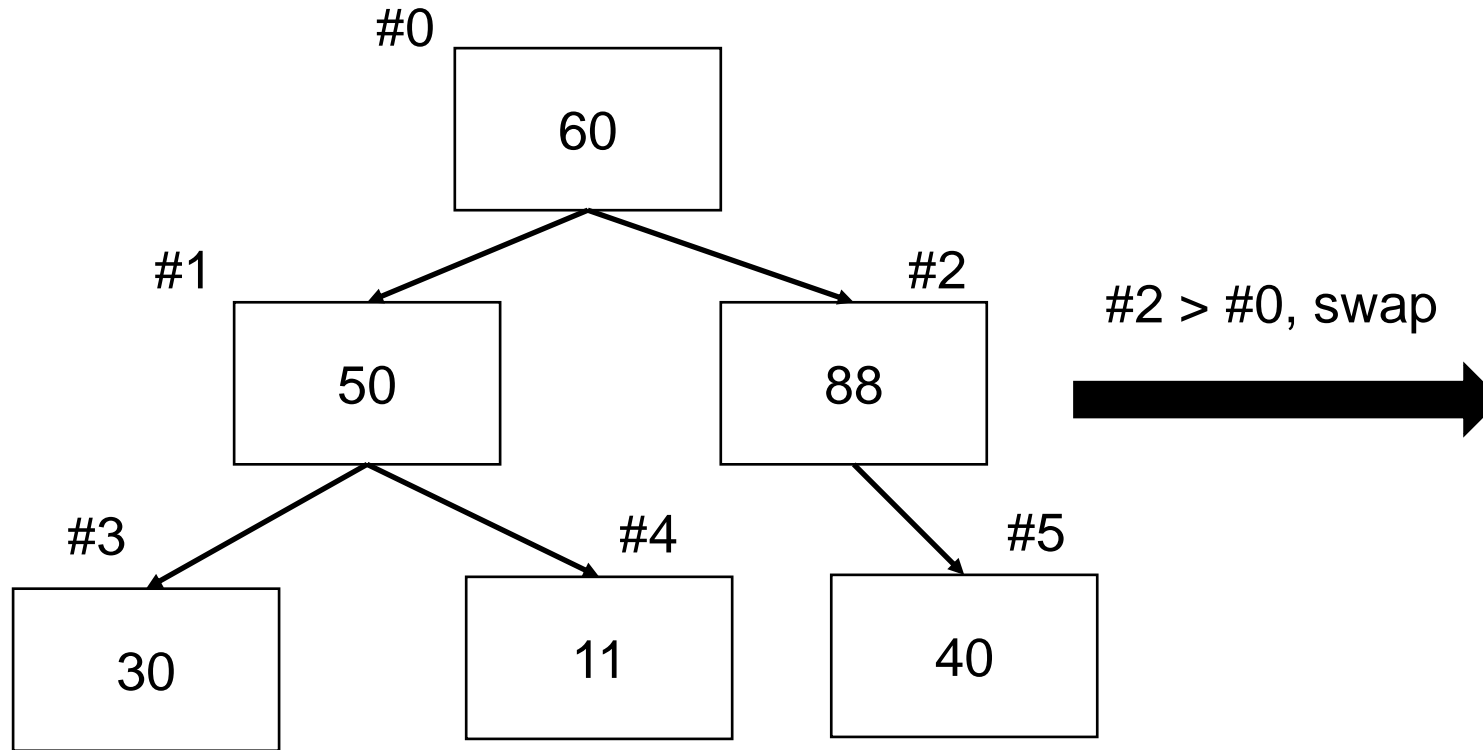
To insert: 88, 22, 77

	0	1	2	3	4	5	6	7
<i>H</i>	60	50	40	30	11	-	-	-



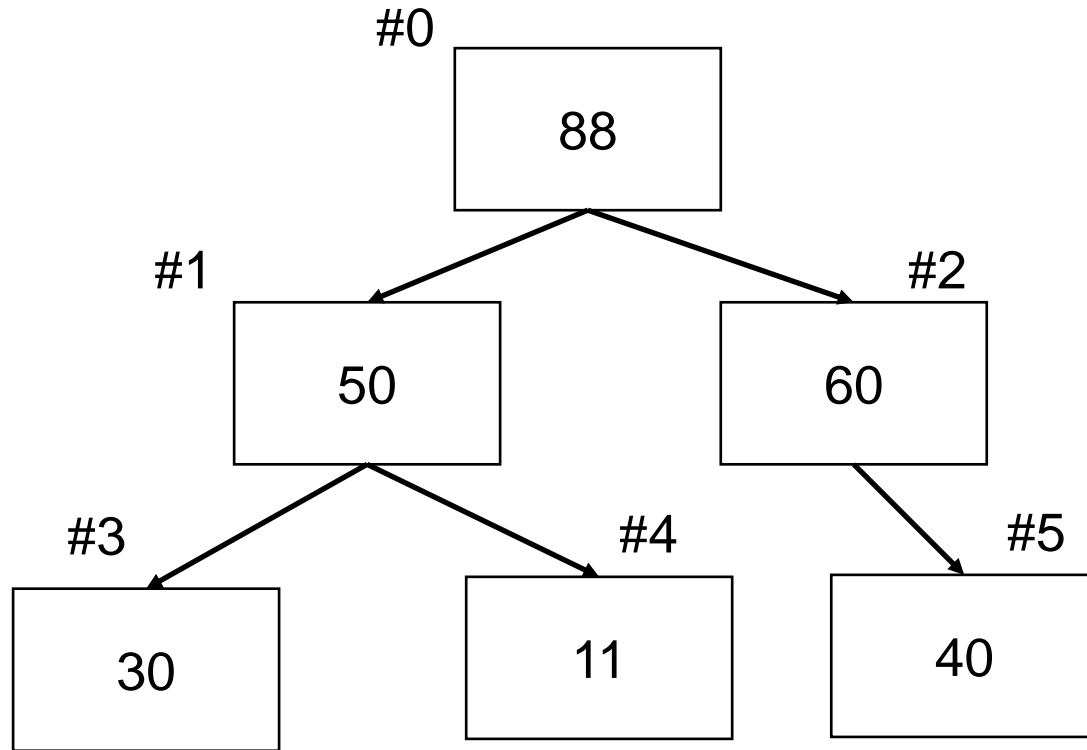
To insert: 22, 77

	0	1	2	3	4	5	6	7
<i>H</i>	60	50	40	30	11	88	-	-



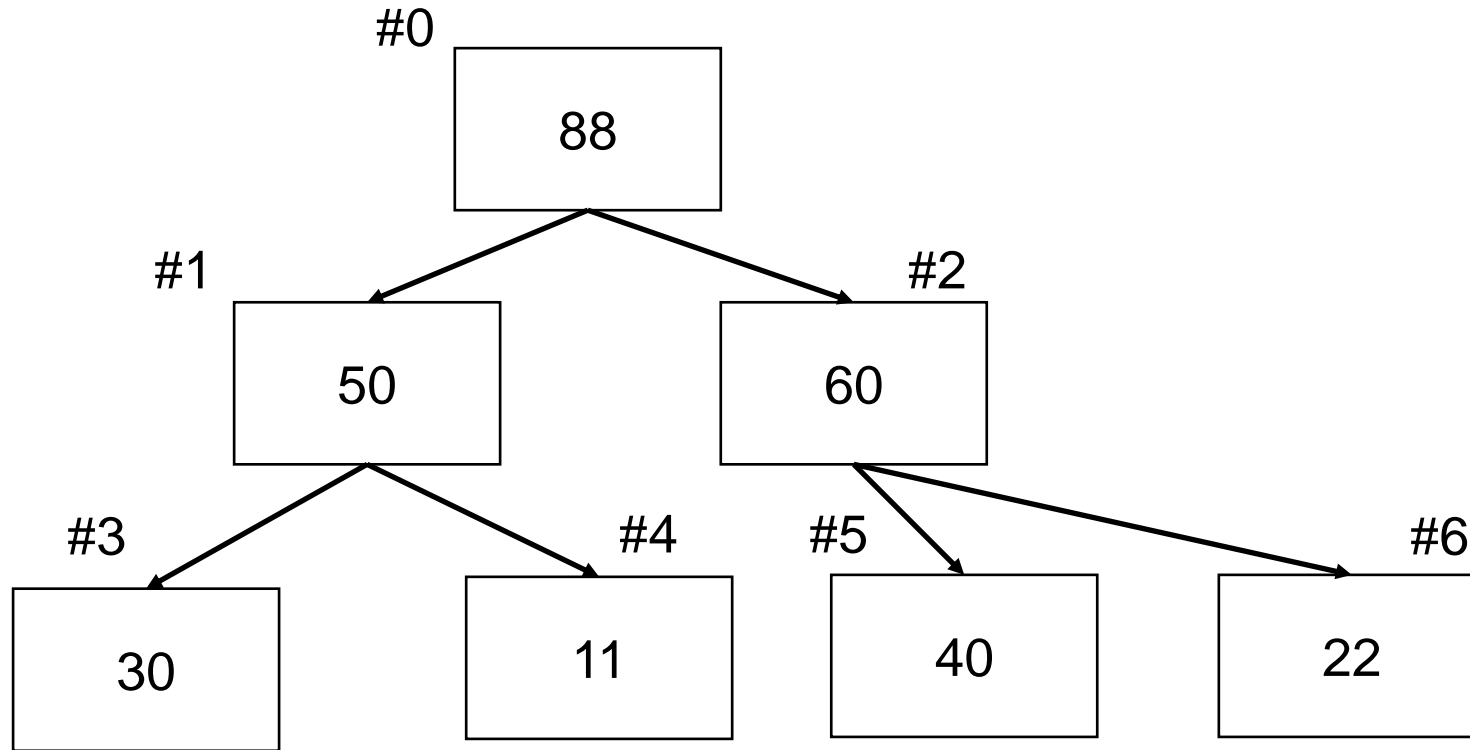
To insert: 22, 77

	0	1	2	3	4	5	6	7
<i>H</i>	60	50	88	30	11	40	-	-



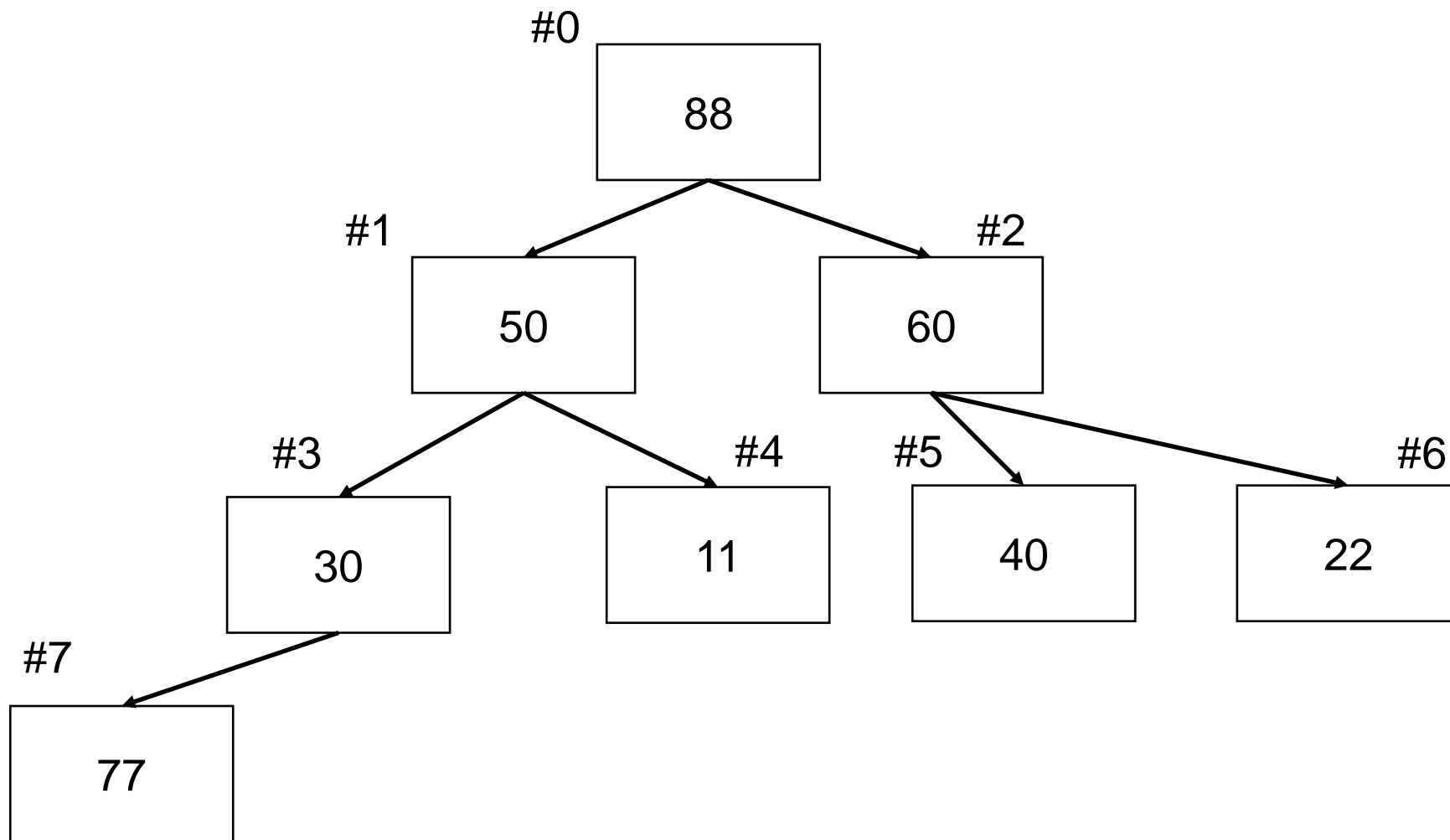
To insert: 22, 77

	0	1	2	3	4	5	6	7
<i>H</i>	88	50	60	30	11	40	-	-



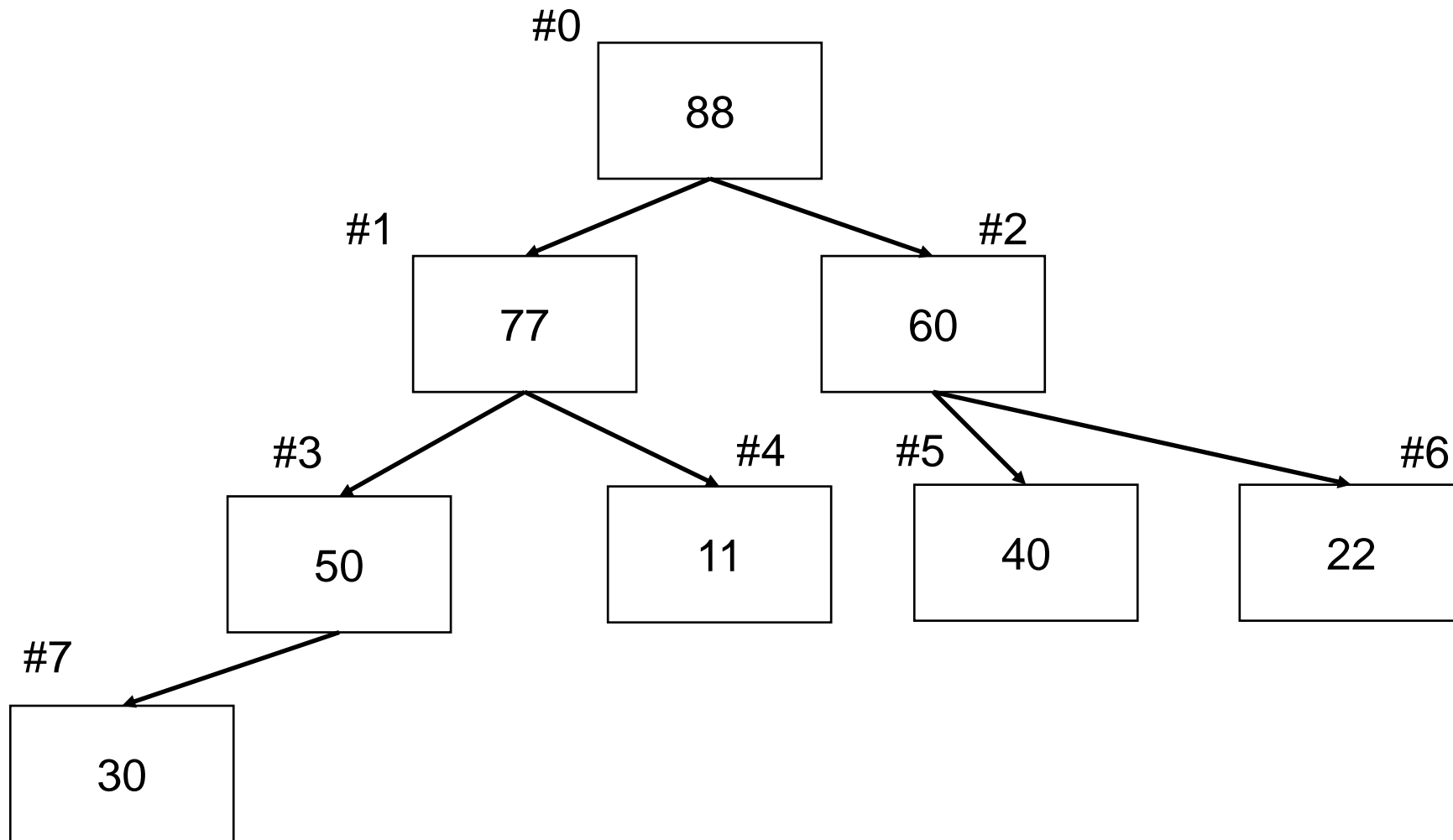
To insert: 77

	0	1	2	3	4	5	6	7
<i>H</i>	88	50	60	30	11	40	22	-



#7 > #3, swap
#7 > #1, swap

	0	1	2	3	4	5	6	7
<i>H</i>	88	50	60	30	11	40	22	77



#7 > #3, swap
#7 > #1, swap

	0	1	2	3	4	5	6	7
<i>H</i>	88	77	60	50	11	40	22	30