Worksheet 34 - Group 1

Worksheet Group 1 Members

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Collaborators

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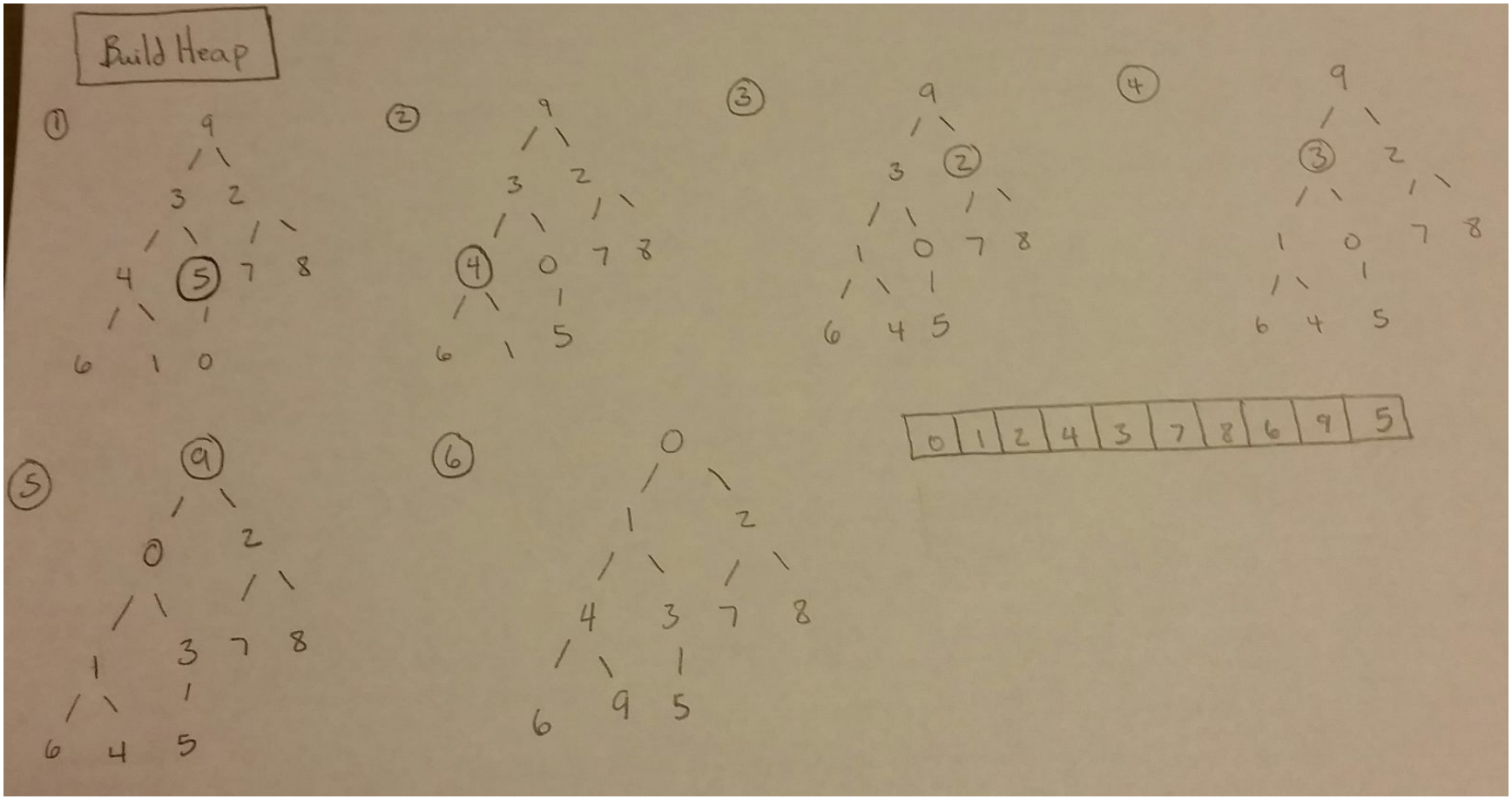
Worksheet 34: BuildHeap and HeapSort

In this worksheet, we simulate the HeapSort algorithm. We do so by first executing the BuildHeap algorithm on the following values:

9 3 2 4 5 7 8 6 1 0

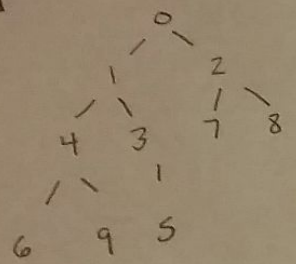
The steps for this process are shown in an image on the next page.



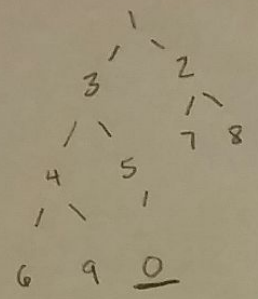
Following the BuildHeap algorithm, we were to execute the HeapSort algorithm on the heap. The steps for this are shown below.

Heap Sort

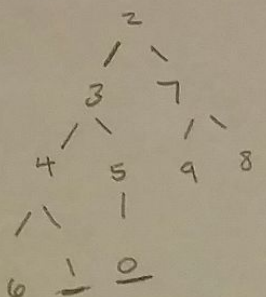
start



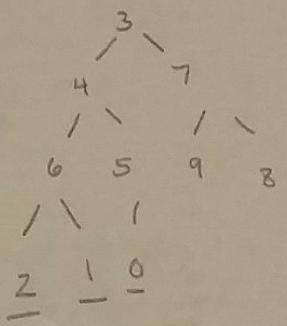
①



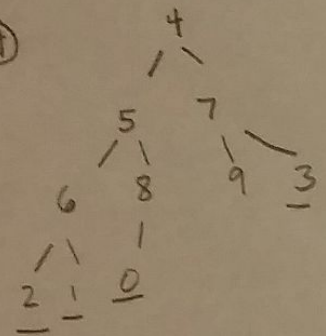
②



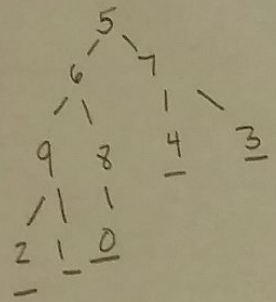
③



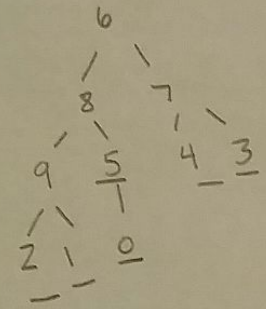
④



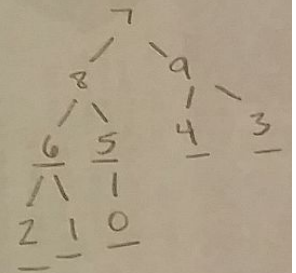
⑤



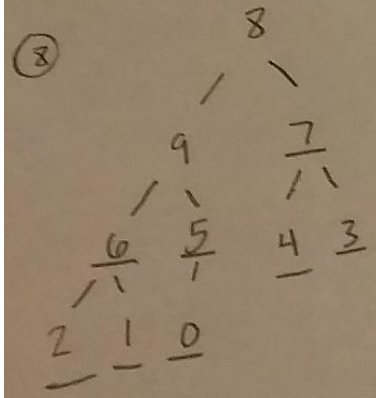
⑥



⑦



⑧



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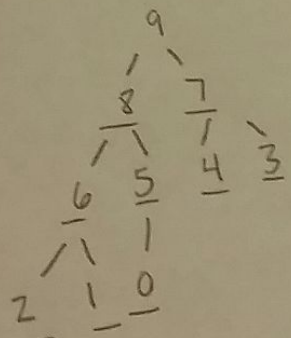

Final version of array

9	8	7	6	5	4	3	2	1	0

Piazza Discussion

https://piazza.com/class/ib2kus4hsie528?cid=209