

# heapSort example

	0	1	2	3	4	5	6	7	8
<b>Import</b>	5	4	1	11	10	3	2	16	12

	0	1	2	3	4	5	6	7	8
<b>After Heapify</b>	16	12	3	11	10	1	2	5	4

	0	1	2	3	4	5	6	7	8
<b>After 1<sup>st</sup> swap</b>	4	12	3	11	10	1	2	5	16

After trickleDown	0	1	2	3	4	5	6	7	8
	12	11	3	5	10	1	2	4	16
After 2 <sup>nd</sup> swap	0	1	2	3	4	5	6	7	8
	4	11	3	5	10	1	2	12	16
After trickleDown	0	1	2	3	4	5	6	7	8
	11	10	3	5	4	1	2	12	16
After 3 <sup>rd</sup> swap	0	1	2	3	4	5	6	7	8
	2	10	3	5	4	1	11	12	16
After trickleDown	0	1	2	3	4	5	6	7	8
	10	5	3	2	4	1	11	12	16

**After 4<sup>th</sup>  
swap**

0	1	2	3	4	5	6	7	8
1	5	3	2	4	10	11	12	16

**After  
trickleDown**

0	1	2	3	4	5	6	7	8
5	4	3	2	1	10	11	12	16

**After 5<sup>th</sup>  
swap**

0	1	2	3	4	5	6	7	8
1	4	3	2	5	10	11	12	16

**After  
trickleDown**

0	1	2	3	4	5	6	7	8
4	2	3	1	5	10	11	12	16

**After 6<sup>th</sup>  
swap**

0	1	2	3	4	5	6	7	8
1	2	3	4	5	10	11	12	16

**After  
trickleDown**

0	1	2	3	4	5	6	7	8
3	2	1	4	5	10	11	12	16

**After 7<sup>th</sup>  
swap**

0	1	2	3	4	5	6	7	8
1	2	3	4	5	10	11	12	16

**After  
trickleDown**

0	1	2	3	4	5	6	7	8
2	1	3	4	5	10	11	12	16

**After 8<sup>th</sup>  
swap**

0	1	2	3	4	5	6	7	8
1	2	3	4	5	10	11	12	16