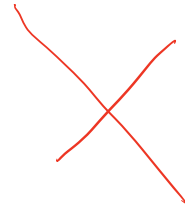


## 6.4 Heap sort

→ Heap:



→ Max heap:

Heap up:

$2^0$

$2^1$

$2^2$

$i$

$2i+1$

$2i+2$

$j$

Where are the children?

Where are the parents?

→ Insert costs  $\lfloor \log n \rfloor$

Removing From the heap

3

$2^0$

$2^1$

13

$2^2$

3

15

length - 1

Remove 15

Loop  $n-1$  times

13

3

6

13 6

2 3

3

