heaps
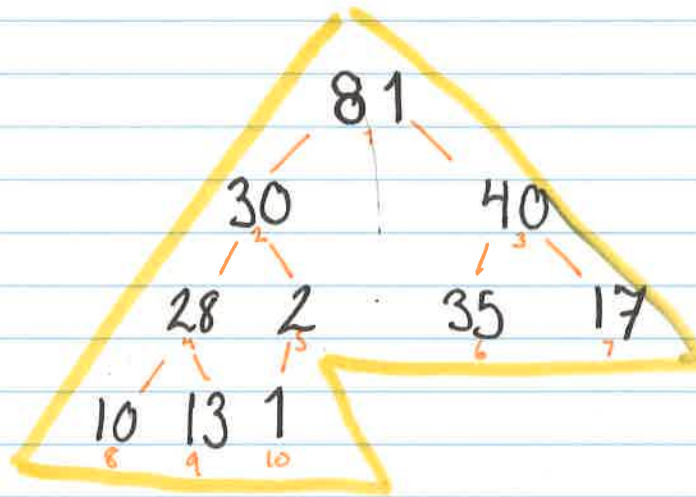
- BINARY TREE WITH TWO EXTRA PROPERTIES
  1) FULL; FILLS LEFT TO RIGHT
  2) CHILDREN NOT LARGER THAN PARENT

- SUBTREES OF HEAPS ARE HEAPS

NOTE: SEXY SHAPE

NOTE: ARRAY STARTED AT 1 NOT 0

1	2	3	4	5	6	7	8	9	10	11	12
81	30	40	28	2	35	17	10	13	1		

$$\text{LEFT}(i) = 2i$$
$$\text{RIGHT}(i) = 2i + 1$$
$$\text{PARENT}(i) = \lfloor i/2 \rfloor$$