part a) [6, 2, 26, 24, 22, 20, 18, 46, 49]

SHOULD BE ROOT

CHILD OUT OF PLACE
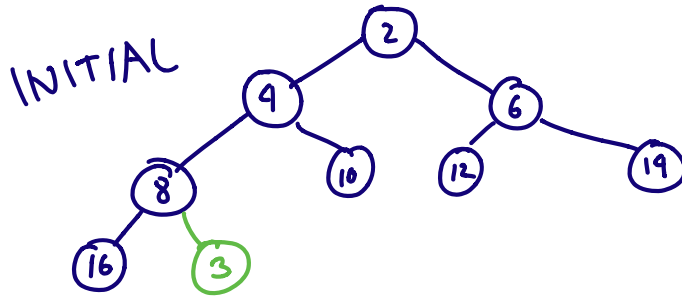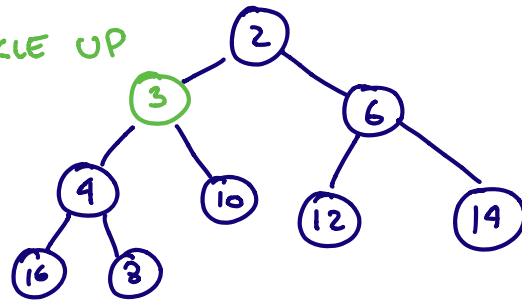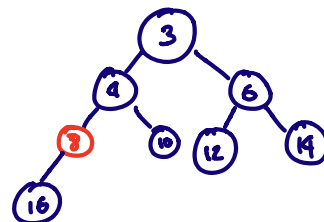
VALID
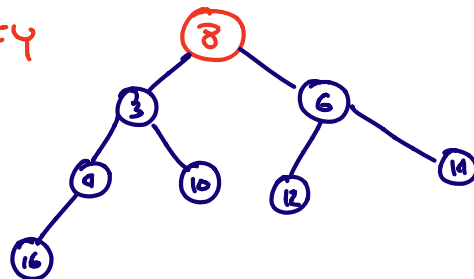[2, 16, 4, 50, 18, 5, 28, 71]
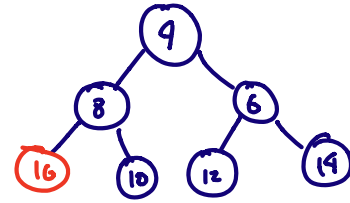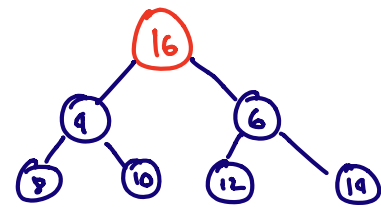
VALID
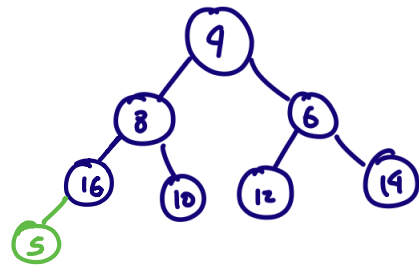[2, 16, 4, 10, 18, 26, 28, 11]

part b)

INITIAL
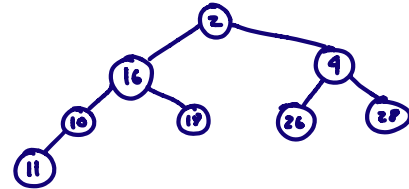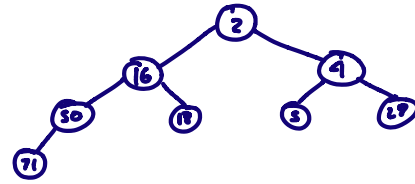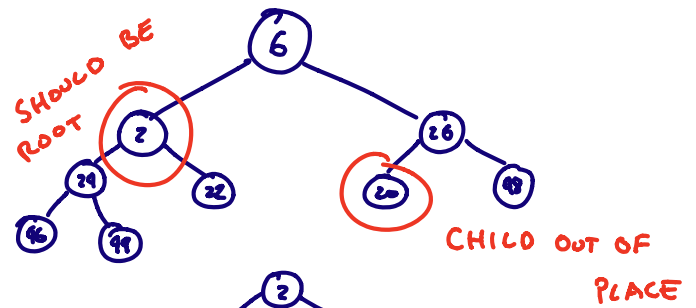
INSERT 3 → TRICKLE UP

POP 2 → HEAPIFY

POP 3 → HEAPIFY

INSERT 5 → TRICKLE UP

FINAL TREE

$$[4, 5, 6, 8, 10, 12, 19, 16]$$