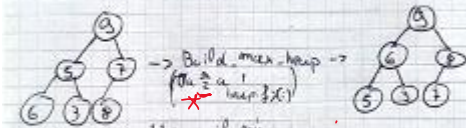


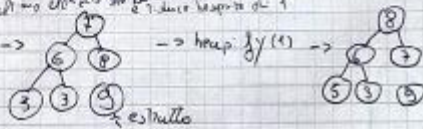
(5) HEAP-SORT

$A = [9, 5, 7, 6, 3, 8] \rightarrow \text{Build_max_heap} \rightarrow A = [9, 6, 8, 5, 3, 7]$



* $\frac{n}{2}$

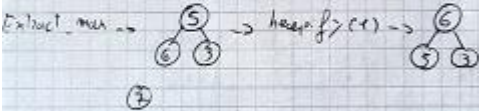
Extract_max \rightarrow (Note: The diagram shows the root node 9 being swapped with its last child 7, and then the new root 7 being bubbled down.)



$A = [8, 6, 7, 5, 3, 9]$



$A = [7, 6, 5, 8, 3, 9]$



$A = [6, 5, 3, 8, 7, 9]$

Extract_max \rightarrow (Note: The diagram shows the root node 6 being swapped with its last child 3, and then the new root 3 being bubbled down to its left child 5, resulting in [5, 3, 6, 8, 7, 9].) \rightarrow a questo punto la procedura heapsort termina $A = [3, 5, 6, 7, 8, 9]$