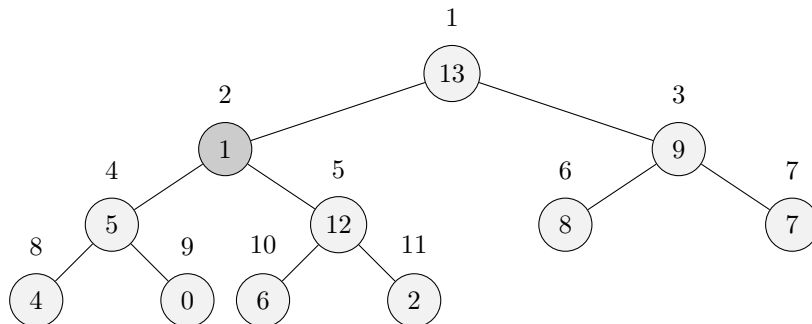
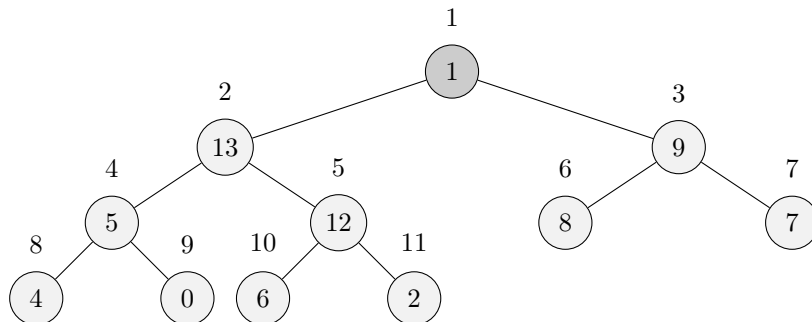
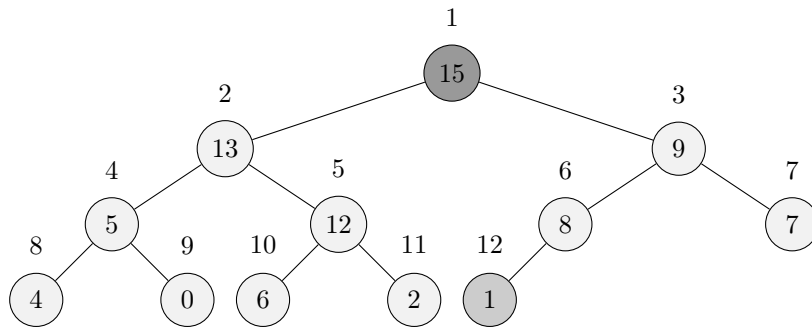


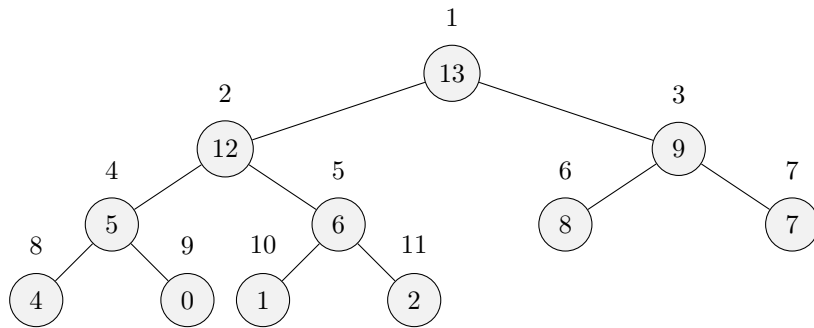
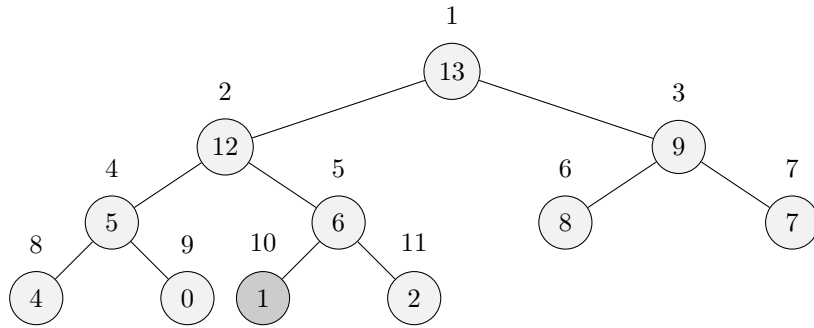
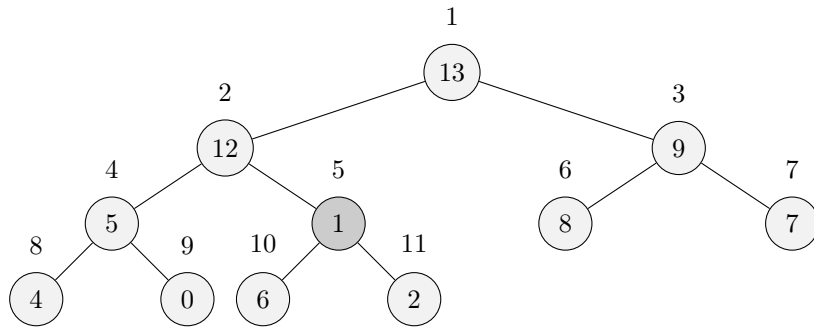
# Lista 8 - Filas de Prioridades

Vinícius Couto Tasso

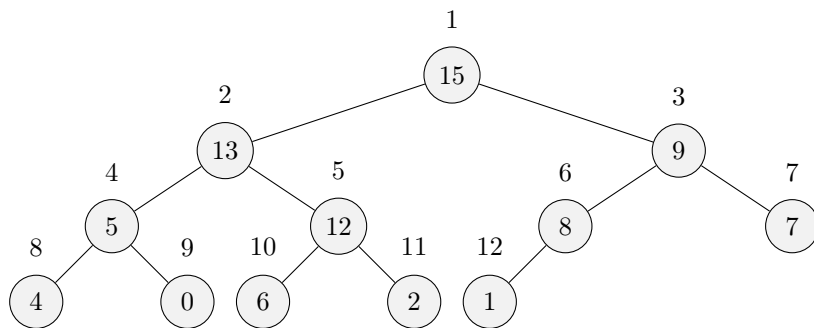
- Ilustre as operações **HEAP-EXTRACT-MAX** e **MAX-HEAP-INSERT**( $V, size, 10$ ), de forma independente, sobre o heap  $V = \langle 15, 13, 9, 5, 12, 8, 7, 4, 0, 6, 2, 1 \rangle$  (mostre uma árvore para cada operação).

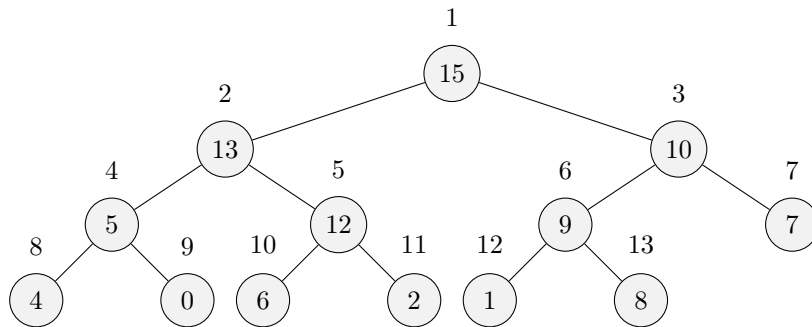
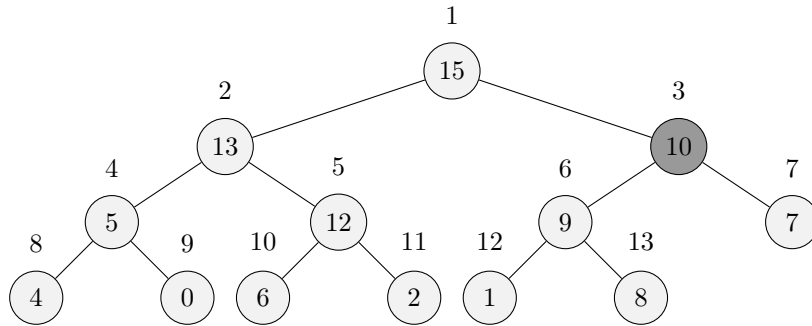
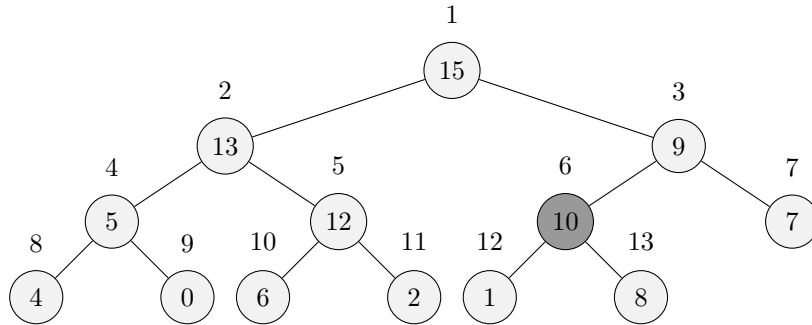
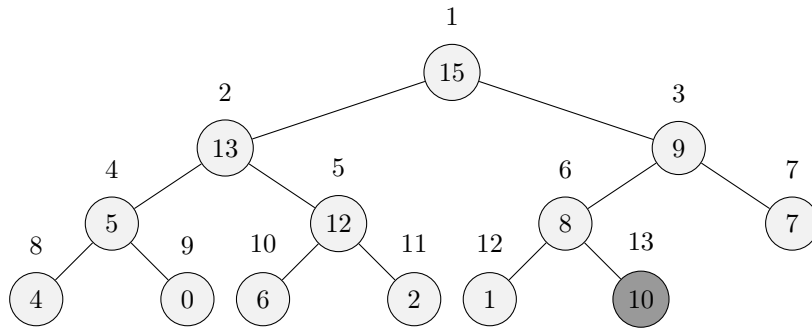
HEAP-EXTRACT-MAX:





MAX-HEAP-INSERT(V,size,10):





2. Mostre como implementar uma operação **HEAP-DECREASE-KEY** para um heap máximo.

```
void heap_decrease_key(int V[], int size, int idx, int key) {
    if (key > V[idx]) {
        printf("Error: Expected key less than %d, got %d.\n", V[idx], key);
        return;
    }

    V[idx] = key;
    max_heapify(V, size, idx);
}
```