

Lista - Aula 5 - AED II -

1- [15, 2, 5, 1, 11, 8, 3, 13, 12, 6, 7, 10, 11, 9, 1, 4]

Utilizando 2 caminhos e 4 registros, teremos:

15, 2, 5, 1, 11, 8, 3, 13, 12, 6, 7, 10, 11, 9, 1, 4, ou

seja:

arg 1- 1, 2, 5, 15 | 3, 8, 11, 13

arg 2- 6, 7, 10, 12 | 1, 4, 9, 11, após a fase de distribuição,

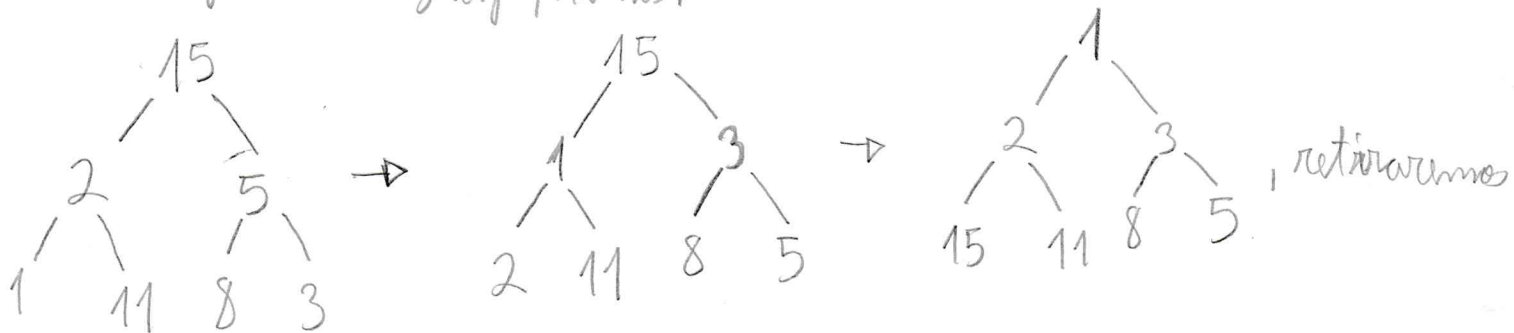
teremos a união em um outro arquivo de tamanho 8:

arg 3- 1, 2, 5, 6, 7, 10, 12, 15 | 1, 3, 4, 8, 9, 11, 11, 13, retornando ao arquivo 1, temos a intercalação em tamanho 16:

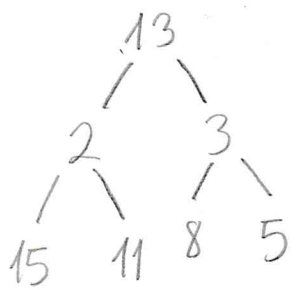
arg 1- 1, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 11, 12, 13, 15, que é o vetor ordenado.

2- [15, 2, 5, 1, 11, 8, 3, 13, 12, 6, 7, 10, 11, 9, 1, 4]

fazendo o primeiro heap, temos:

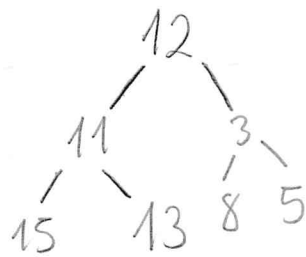


o primeiro no heap e colocaremos mais um no heap:



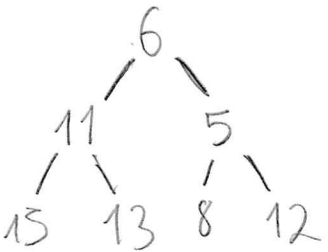
arg 1: 1

⇒



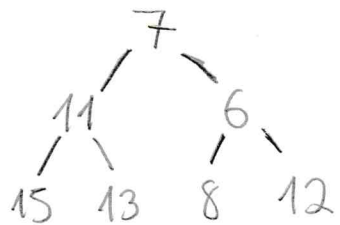
arg 1: 1, 2

⇒

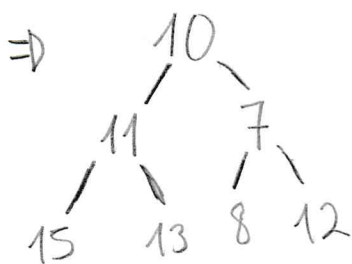


arg 1: 1, 2, 3

⇒

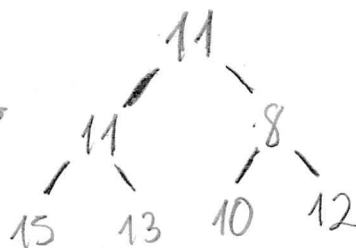


arg 1: 1, 2, 3, 5

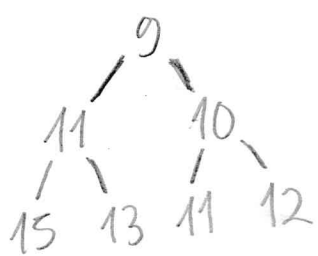


arg 1: 1, 2, 3, 5, 6

⇒



arg 1: 1, 2, 3, 5, 6, 7



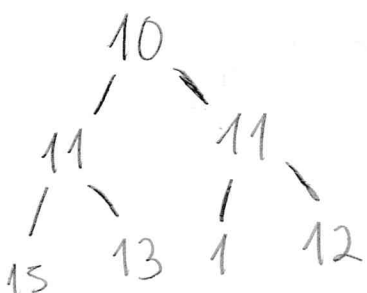
arg 1: 1, 2, 3, 5, 6, 7, 8

⇒



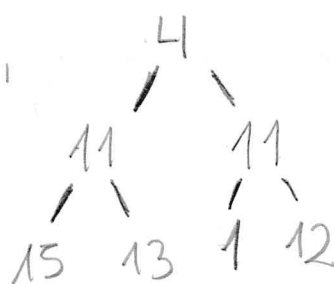
arg 1: 1, 2, 3, 5, 6, 7, 8, 9

Como $1 < 9$, o 1 ganha peso maior:



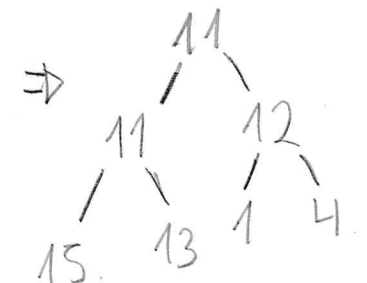
arg 1: 1, 2, 3, 5, 6, 7, 8, 9

⇒



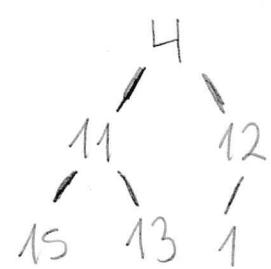
arg 1: 1, 2, 3, 5, 6, 7, 8, 9, 10

Da mesma forma, $4 < 10$:

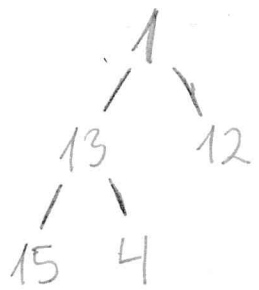


arg 1: 1, 2, 3, 5, 6, 7, 8, 9, 10

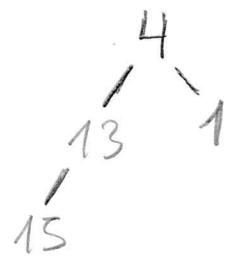
⇒



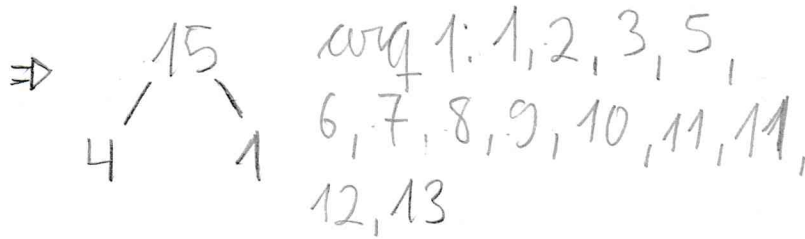
arg 1: 1, 2, 3, 5, 6, 7, 8, 9, 10, 11



arg 1: 1, 2, 3, 5,
6, 7, 8, 9, 10, 11, 11 \Rightarrow



arg 1: 1, 2, 3, 5, 6,
7, 8, 9, 10, 11, 11,
12.



arg 1: 1, 2, 3, 5,
6, 7, 8, 9, 10, 11, 11,
12, 13

\Rightarrow arg 1: 1, 2, 3, 5, 6, 7, 8, 9,
10, 11, 11, 12, 13, 15,
arg 2: 1, 4.

Utilizando intercalações, temos:

arg 1: 1, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 11, 12, 13, 15.

3 - [15, 2, 5, 1, 11, 8, 3].

i	L_i					L_s	j	pivô	L_{inf}	L_{sup}
	15	2	5	1	11	8	3		$-\infty$	$+\infty$
	E_i						E_s			

i	L_i				L_s		j	pivô	L_{inf}	L_{sup}
	15	2	5	1	11	8	3	3, 15, 8	$-\infty$	$+\infty$
	E_i						E_s			

i	L_i				L_s		j	pivô	L_{inf}	L_{sup}
	15	2	3	1	11	8	15	3, 8	$-\infty$	15
	E_i						E_s			

i	L_i				L_s		j	pivô	L_{inf}	L_{sup}
	15	2	5	1	11	8	15	3, 8, 2	$-\infty$	15
	E_i						E_s			

i	L_i				L_s		j	pivô	L_{inf}	L_{sup}
	2	2	5	1	11	8	15	3, 8	2	15
	E_i						E_s			

	L _i	L _j		pivô		L inf.	L sup.
2	2	5	1	11	11	15	
E _i			E _s	3,8		2	11

2. 3. 5. 1 11 11 15 \hat{piv}^1 L_{inf} $L_{sup.}$
 E_i E_o 5,8 3 11

2 3 $\begin{matrix} L_i & L_r \\ 1 & 5 & 8 \\ \hline & V & E_r \end{matrix}$ 11 15 $\begin{matrix} \text{pivo} \\ 11 \end{matrix}$ $\begin{matrix} L_{inf} \\ 3 \end{matrix}$ $\begin{matrix} L_{sup} \\ 11 \end{matrix}$

Para ordenar, tomaremos a partição de 3 elementos:

L_i L_{i+1} \hat{piv}_i L_{inf} L_{sup}
 2 3 1 $-\infty$ $+\infty$
 E_i E_{i+1}

$$\begin{array}{ccc} L_n & L_i & \\ 1 & 2 & 3 \\ E_n & & E_i \end{array} \quad \hat{p}(\omega) \quad \begin{array}{cc} L_{\inf} & L_{\sup} \\ -\infty & +\infty \end{array}$$

1. Como as autoras

partições já estão ordenadas, manteremos elas:

1, 2, 3, 5, 8, 11, 15 //