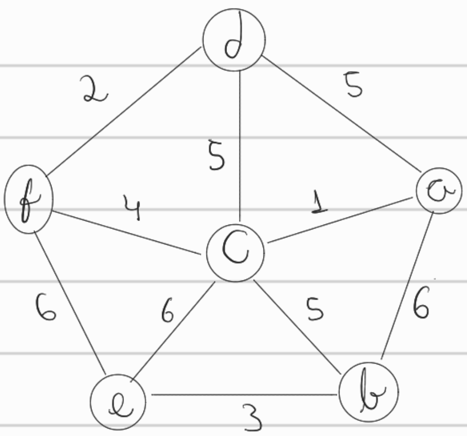
$G = (\{a,b,c,d,e,f\}, \{\{a,b\},\{a,c\},\{a,d\},\{b,c\},\{b,e\},\{c,d\},\{c,e\},\{c,f\},\{d,f\},\{e,f\}\}, w)$

6 1 5 5 3 5 6 4 2 6



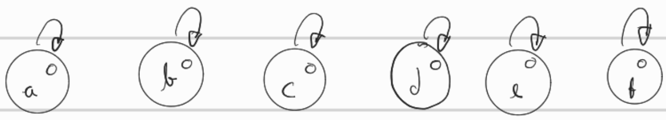
Kruskal

Ordenando arestas pelo peso:

$w(\{a,c\}) = 1$ $w(\{d,f\}) = 2$ $w(\{b,e\}) = 3$ $w(\{c,f\}) = 4$ $w(\{a,d\}) = 5$

$w(\{b,c\}) = 5$ $w(\{c,d\}) = 5$ $w(\{a,b\}) = 6$ $w(\{c,e\}) = 6$ $w(\{e,f\}) = 6$

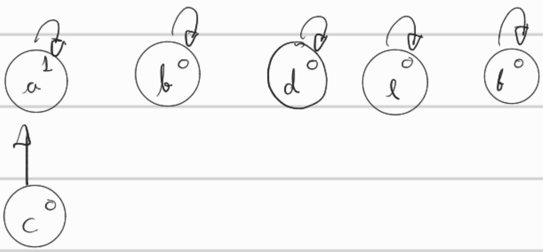
Conjunto disjunto



1° passo:

$X = \{\{a,c\}\}$

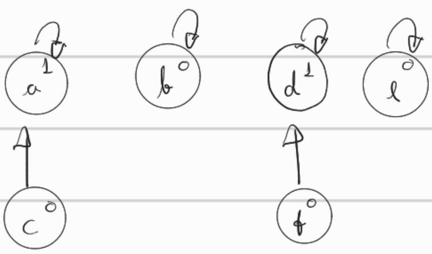
Custo atual: 1



2° passo

$X = \{\{a,c\},\{d,f\}\}$

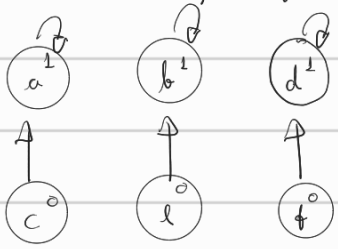
Custo atual: 3



3° passo:

Custo atual: 6

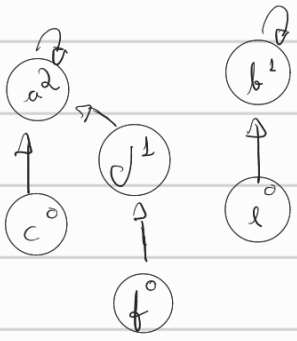
$X = \{\{a,c\}, \{d,f\}, \{b,e\}\}$



4° passo:

$X = \{\{a,c\}, \{d,f\}, \{b,e\}, \{c,f\}\})$

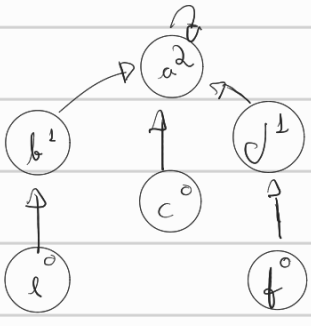
Custo atual: 10



5° passo

$X = \{\{a,c\}, \{d,f\}, \{b,e\}, \{c,f\}, \{b,c\})\}$

Custo atual: 15



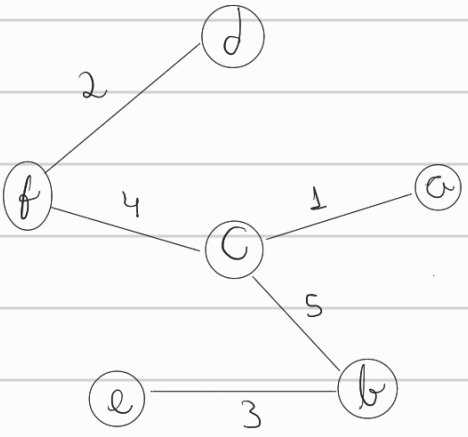
$\{a,c\}$ possuem a mesma raiz

O algoritmo continuará verificando todas as arestas, mas não haverá mais mudanças, pois os vértices estão todos no mesmo conjunto.

Resultado final:

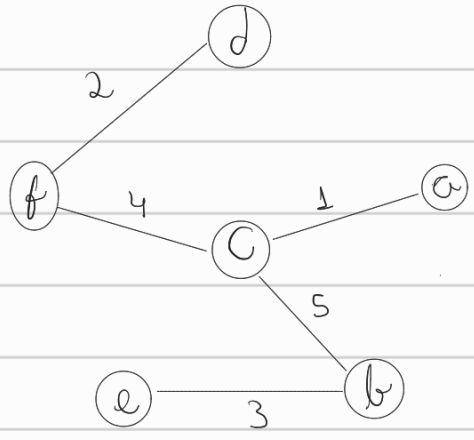
$X = \{\{a,c\}, \{d,f\}, \{b,e\}, \{c,f\}, \{b,c\})\}$

Custo da árvore: 15



Prim

Conjunto	a	b	c	d	e	f
{ }	0/Nil	∞/Nil	∞/Nil	∞/Nil	∞/Nil	∞/Nil
{a}		6/a	1/a	5/a	∞/Nil	∞/Nil
{a, c}		5/c		5/a	6/c	4/c
{a, c, f}		5/c		2/f	6/c	
{a, c, d, f}		5/c			6/c	
{a, b, c, d, f}					3/b	
{a, b, c, d, e, f}						



X = {{b, c}, {a, c}, {d, f}, {b, e}, {c, f}}

Custo total: 15