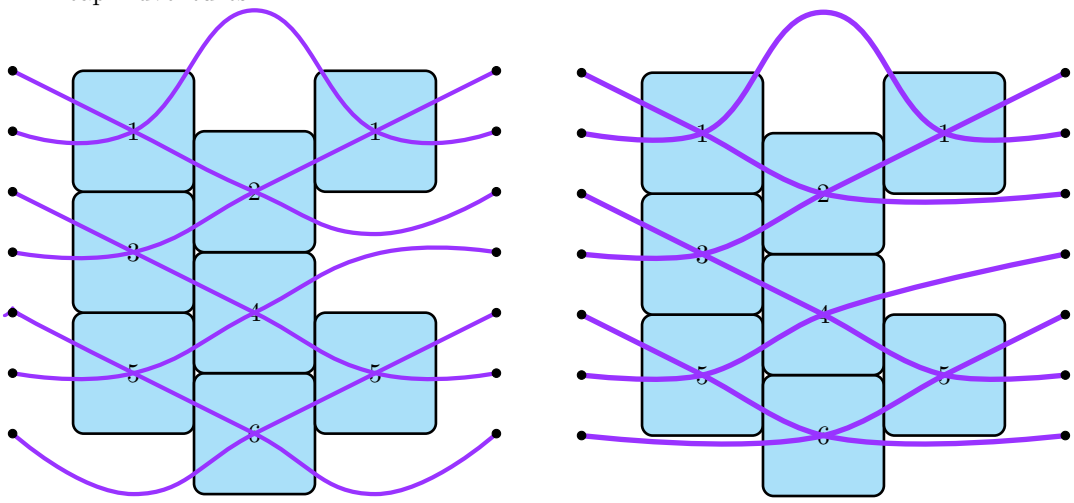
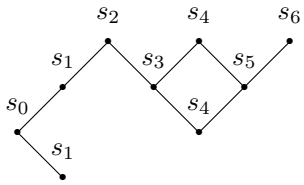
Heap Adventures

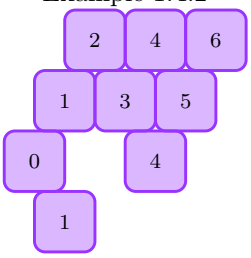


Experiments for Thesis . . .

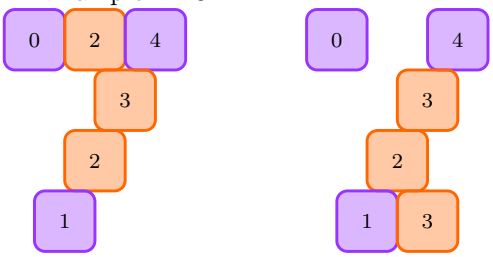
Example 1.4.1



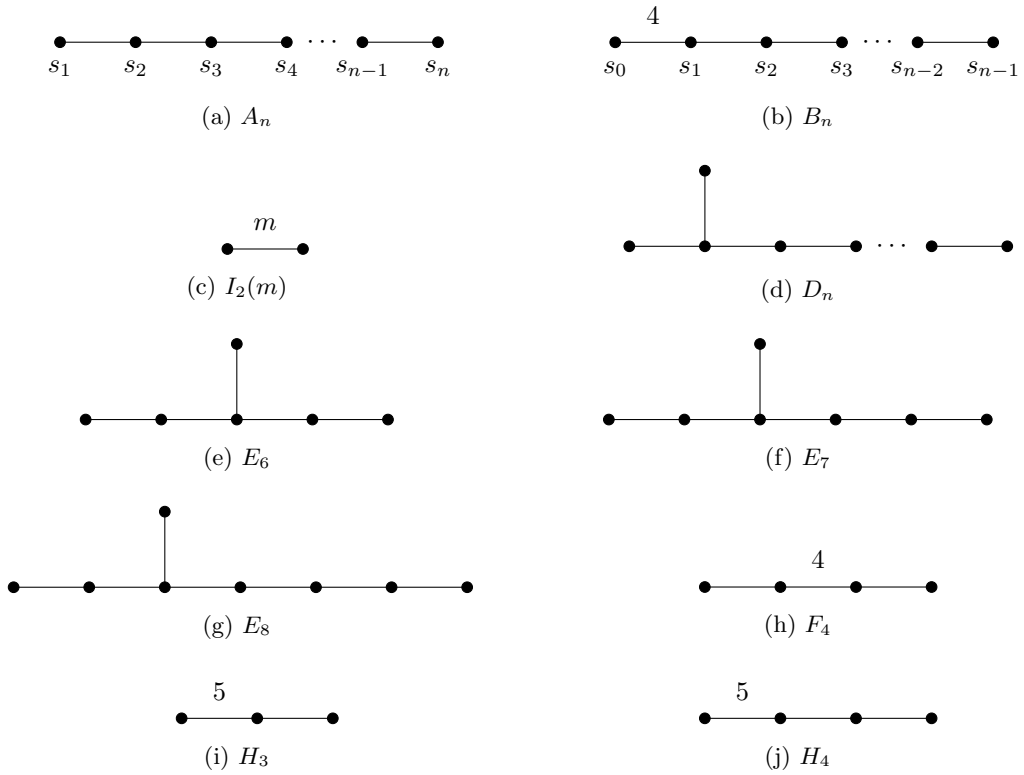
Example 1.4.2



Example 1.4.3



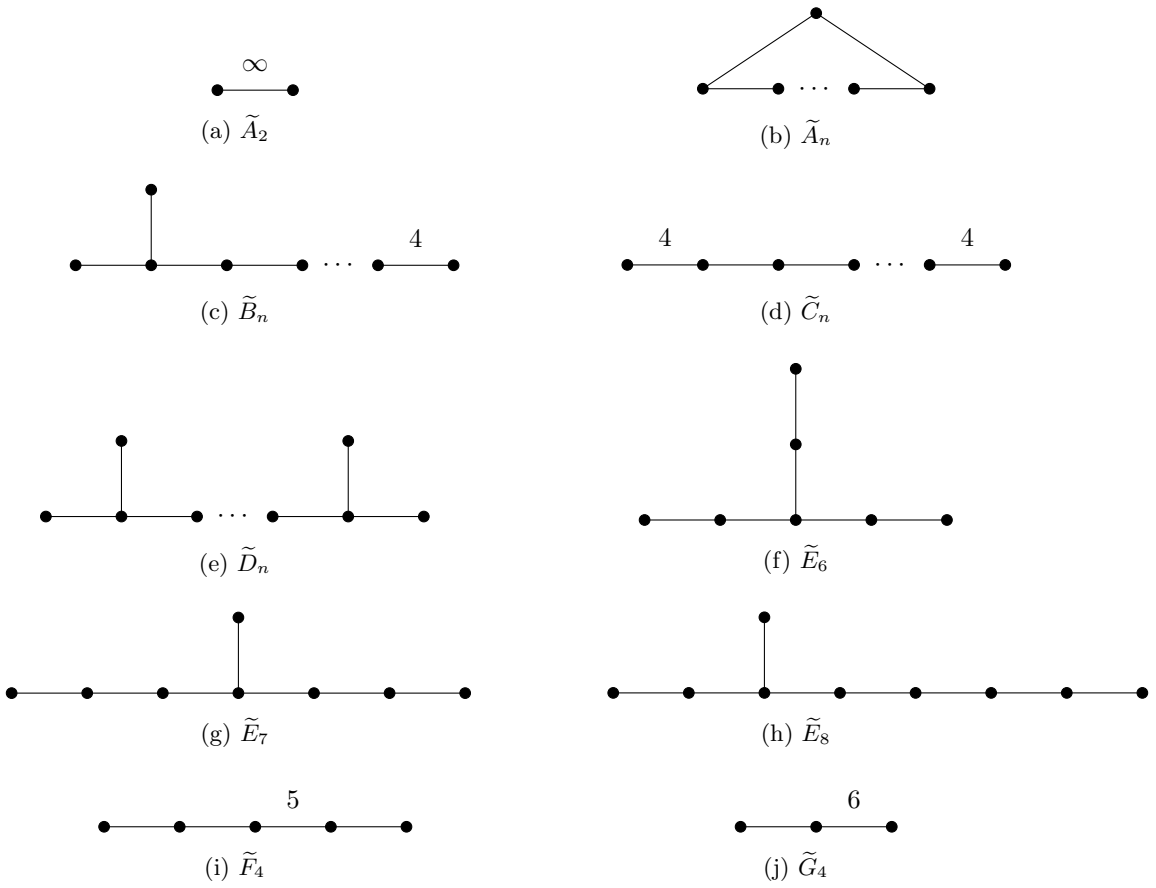
Finite Irreducible Coxeter Graphs Figure



(a) A_n (b) B_n (c) $I_2(m)$ (d) D_n (e) E_6 (f) E_7 (g) E_8 (h) F_4 (i) H_3 (j) H_4

Figure 1: Coxeter graphs corresponding to the finite Coxeter groups.

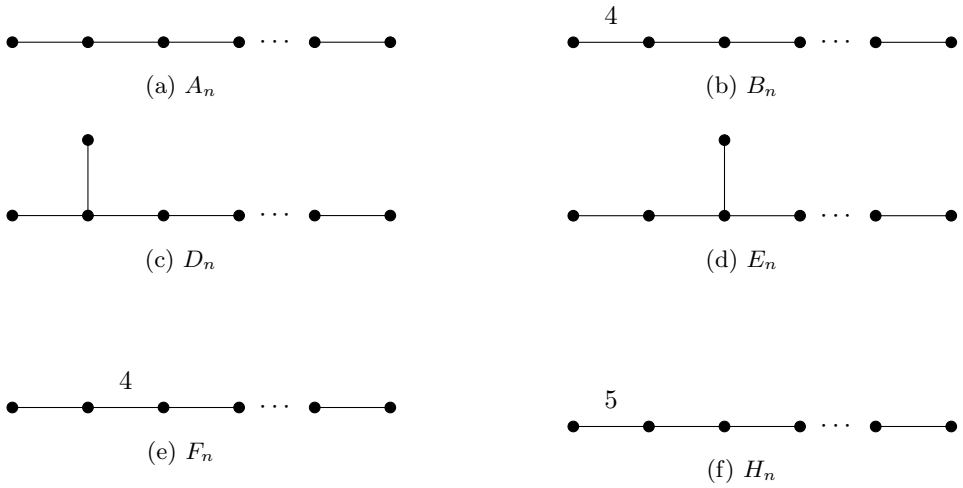
Affine Coxeter Graphs Figure



(a) $\widetilde{A}_2$ (b) $\widetilde{A}_n$ (c) $\widetilde{B}_n$ (d) $\widetilde{C}_n$ (e) $\widetilde{D}_n$ (f) $\widetilde{E}_6$ (g) $\widetilde{E}_7$ (h) $\widetilde{E}_8$ (i) $\widetilde{F}_4$ (j) $\widetilde{G}_4$

Figure 2: Coxeter graphs corresponding to the infinite Coxeter groups

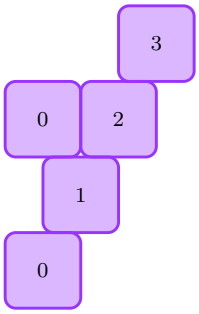
FC-finite Coxeter Groups



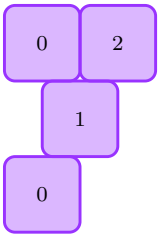
(a) A_n (b) B_n (c) D_n (d) E_n (e) F_n (f) H_n

Figure 3: Coxeter graphs corresponding to the FC-finite Coxeter groups.

Star Reducible Heaps



(a) I don't know what to call this



(b) I don't know what to call this

Figure 4: Visualization of Example **??**

Weak Star Reducible Heap

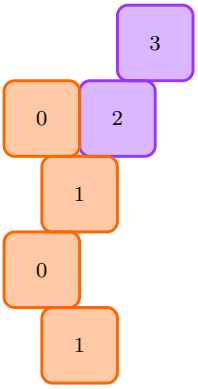
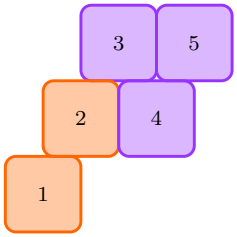
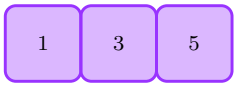


Figure 5: I don't know what to call this

Heaps for Property-T Section



(a) Heap of an element with Property-T



(b) Heap of a T-Avoiding element

Figure 6: Heaps of an element with Property-T and a T-Avoiding element

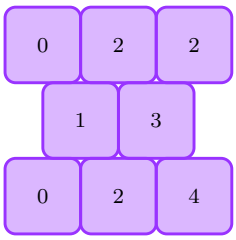


Figure 7: Heap of a non-trivially T-Avoiding element in $W(\widetilde{C}_4)$.

Impermissible subheaps for elements in FC groups

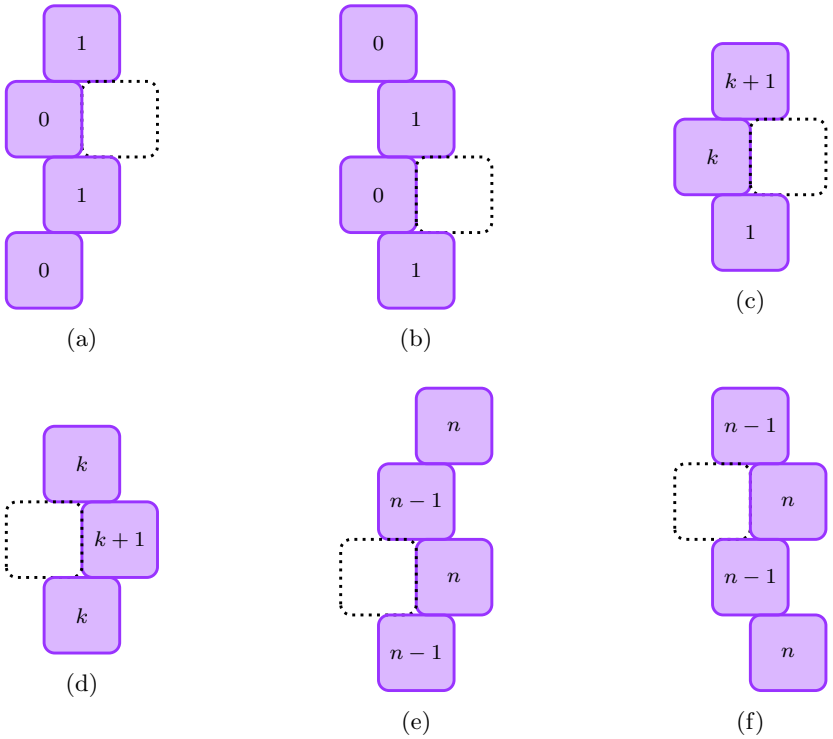


Figure 8: Impermissible subheaps for elements in FC($\widetilde{C}_n$).

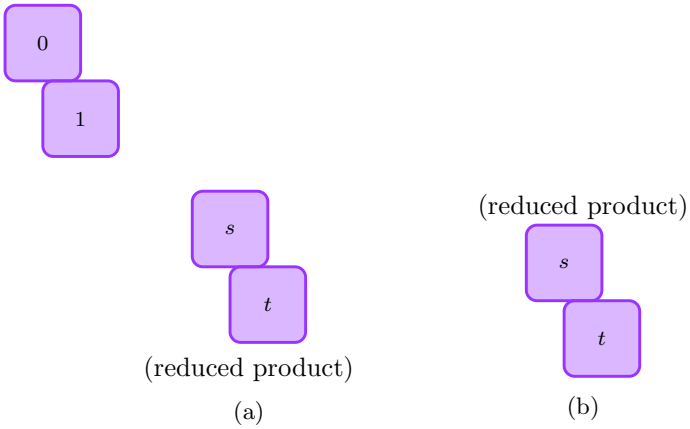


Figure 9: A visual representation of Property T.

Single Bowtie

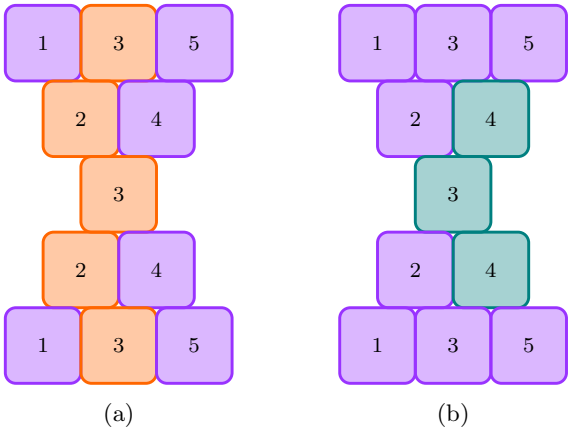


Figure 10: A single bowtie in $W(F_5)$.

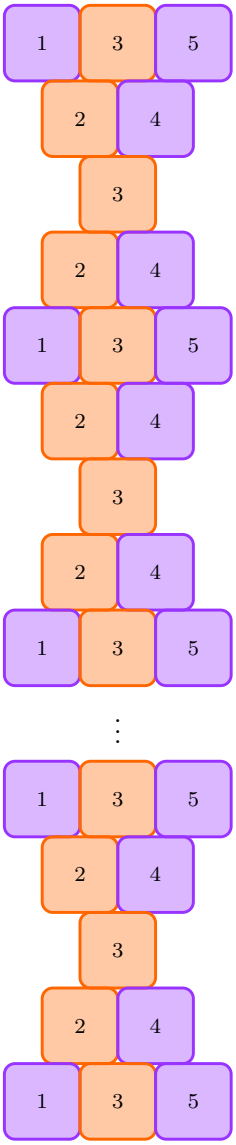


Figure 11: A stack of bowties in $W(F_5)$.

Labeled Coxeter Graphs that the thesis deals with

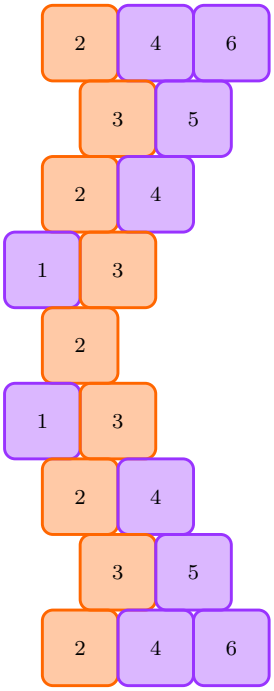


Figure 12: A non-trivial T-avoiding element in $W(F_6)$

Please work?

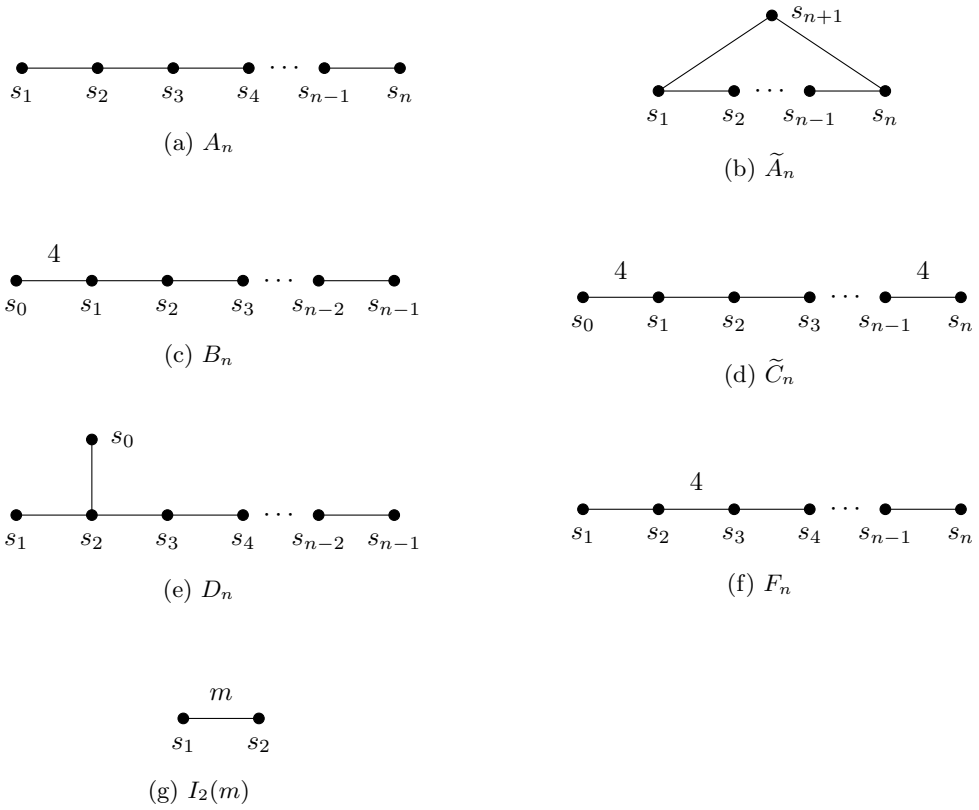
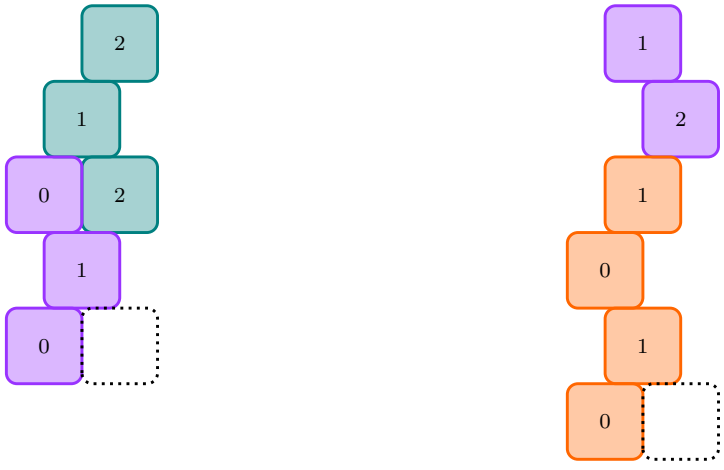


Figure 13: Labeled Coxeter Graphs

Figure 14: Visual representation of the heap configuration discussed in Case 1a.

(a) (b)

Figure 15: Visual representation of the heap configuration discussed in Case 1b.

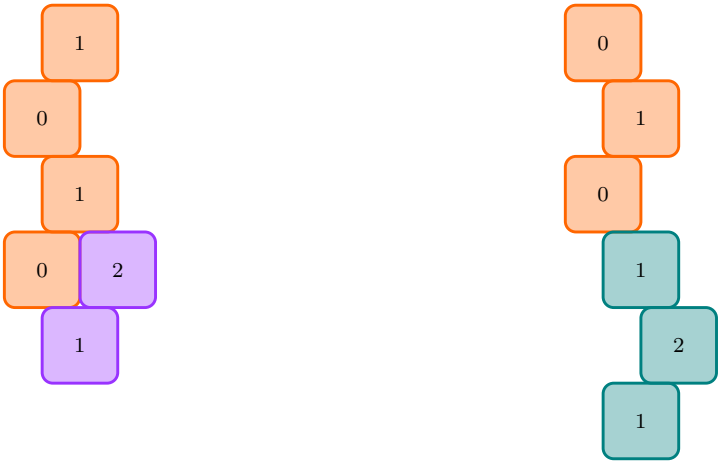


(a) (b)

Figure 16: Visual representation of the heap configuration discussed in Case 2a.

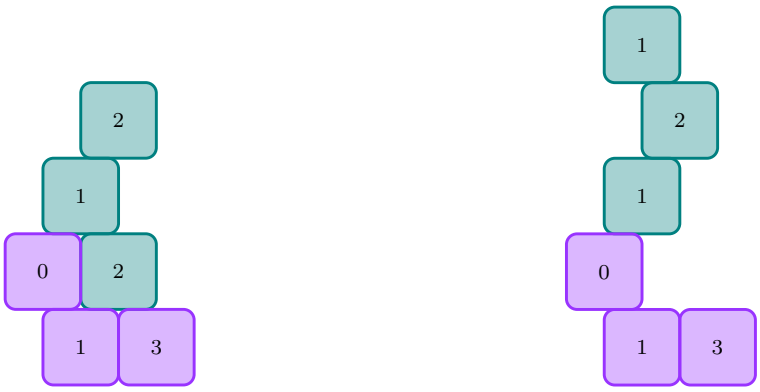
Figure 17: Visual representation of the heap configuration discussed in Case 3a.

Figure 18: Visual representation of the heap configuration discussed in Case 3b.



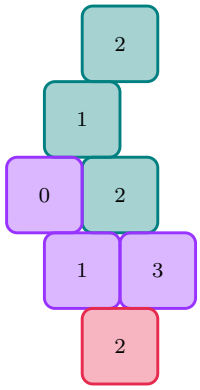
(a) (b)

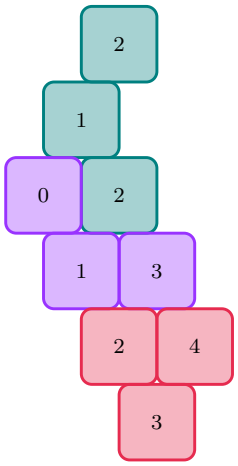
Figure 19: Visual representation of the heap configuration discussed in Case 4.

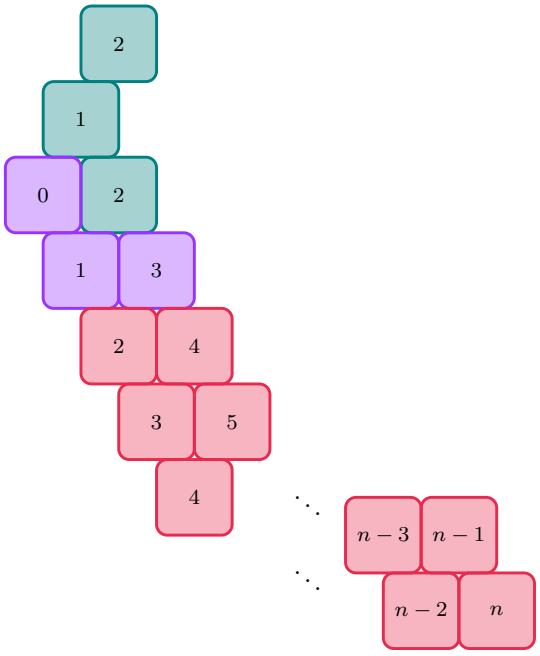


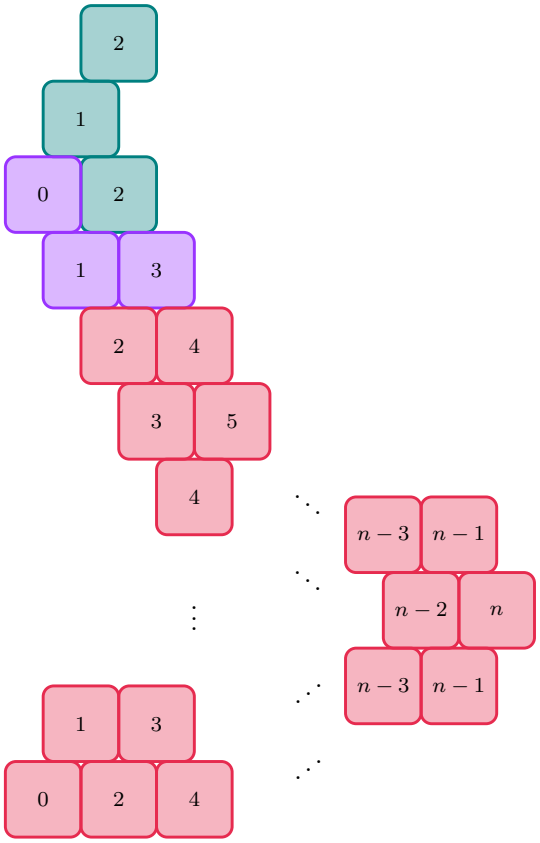
(a) (b)

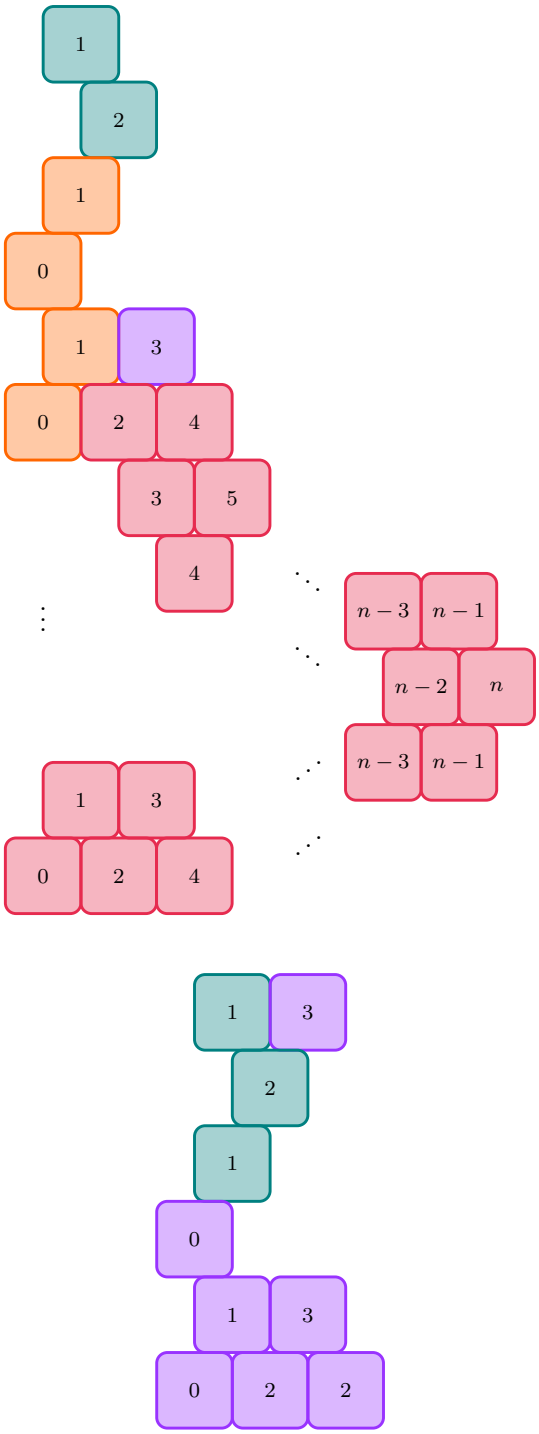
Figure 20: Visual representation of the heap configuration discussed in Case 2b.


2
1
0
2
1
3
2


2
1
0
2
1
3
2
4
3


2
1
0
2
1
3
2
4
3
5
4
$n-3$
$n-1$
$n-2$
n


2
1
0
2
1
3
2
4
3
5
4
$n-3$
$n-1$
$n-2$
n
$n-3$
$n-1$
1
3
0
2
4


1
2
1
0
1
3
0
2
4
3
5
4
$n-3$
$n-1$
$n-2$
n
$n-3$
$n-1$
1
3
0
2
4
1
3
2
1
0
1
3
0
2
2

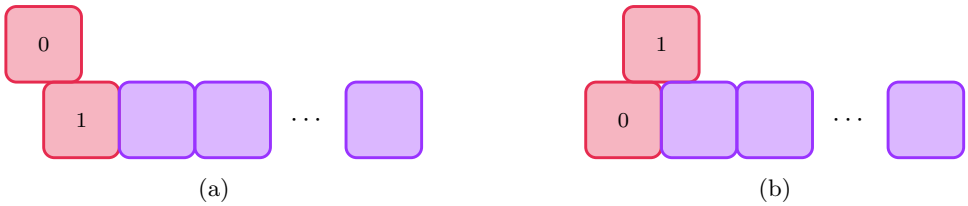


Figure 21: Visualization of all non-cancellable elements in $W(B_n)$.