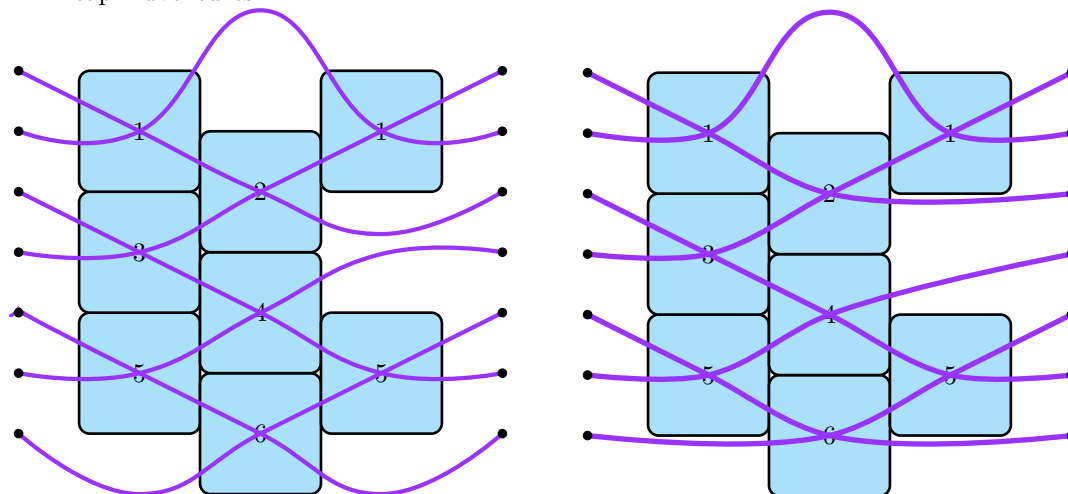Heap Adventures

Experiments for Thesis . . .

Example 1.4.1

s_0 s_1 s_2 s_3 s_4 s_4 s_5 s_6 s_1

Example 1.4.2

	2	4	6
1	3	5	
0		4	
1			

Example 1.4.3

0	2	4
	3	
	2	
1		

0		4
		3
	2	
1	3	

2

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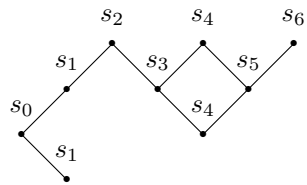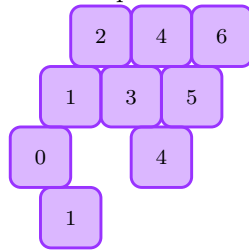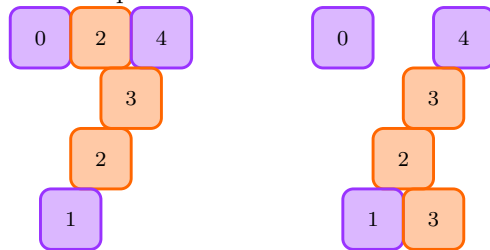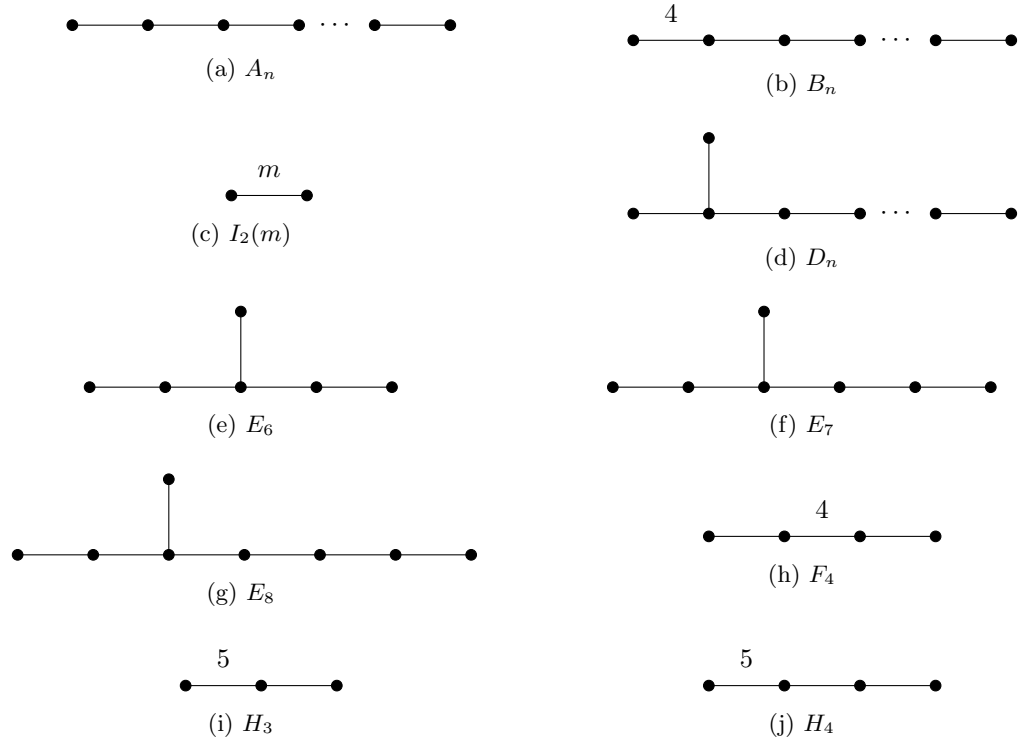
Figure 1: Coxeter graphs corresponding to the finite Coxeter groups.

Infinite Coxeter Graphs Figure

$$\infty$$
(a) $\widetilde{A}_2$

(b) $\widetilde{A}_n$

(c) $\widetilde{B}_n$

4
(d) $\widetilde{C}_n$

(e) $\widetilde{D}_n$

(f) $\widetilde{E}_6$

(g) $\widetilde{E}_7$

(h) $\widetilde{E}_8$

5
(i) $\widetilde{F}_4$

6
(j) $\widetilde{G}_4$
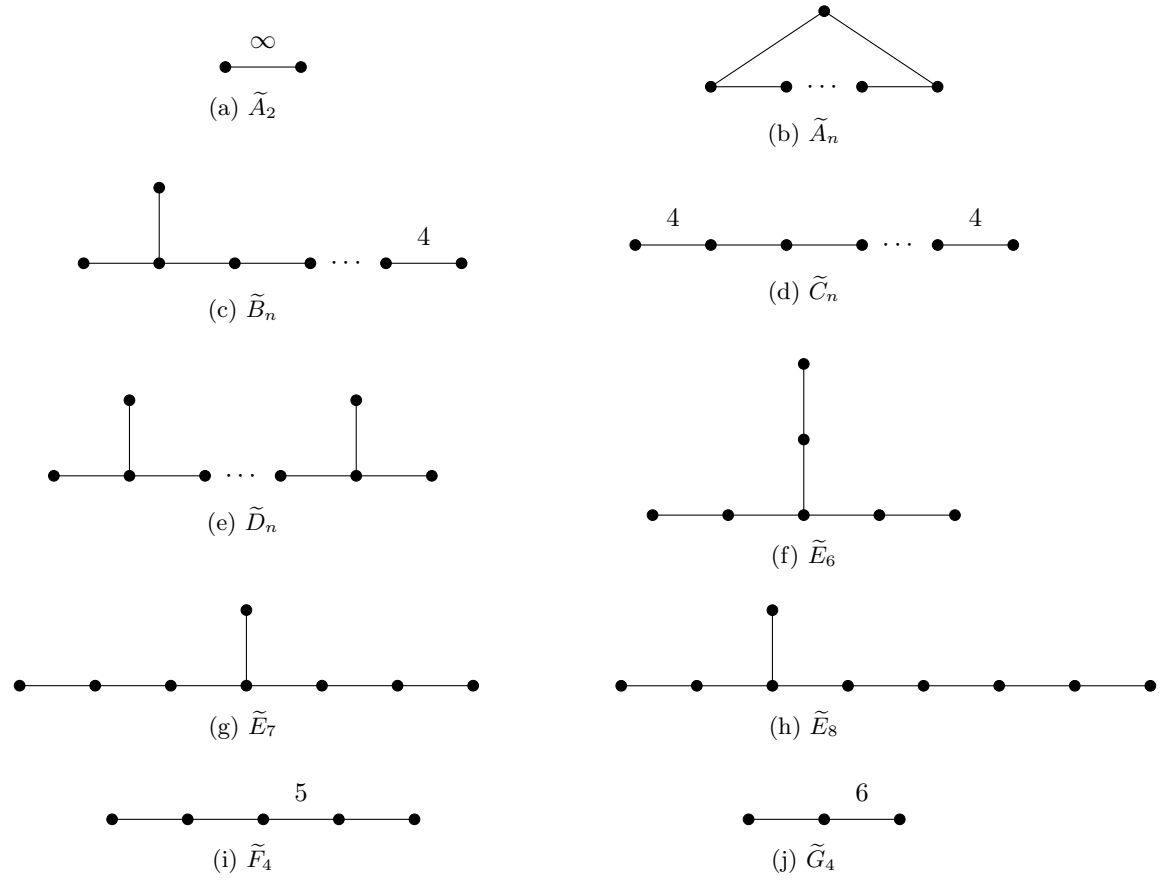
Figure 2: Coxeter graphs corresponding to the infinite Coxeter groups

4

Star Reducible Heaps

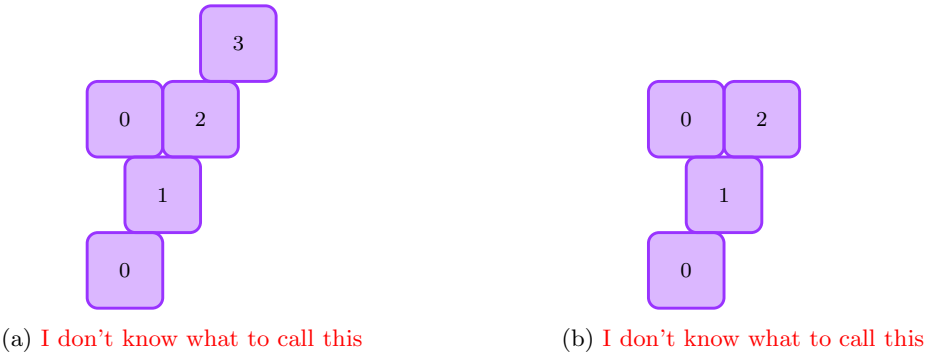(a) I don't know what to call this

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

Figure 3: Visualization of Example ??

Weak Star Reducible Heap
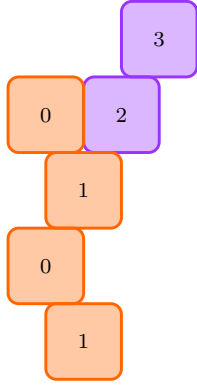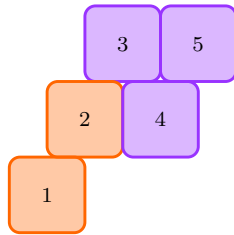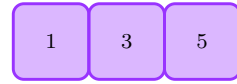
Heaps for Property-T Section

Figure 4: I don't know what to call this

(a) Heap of an element with Property-T

(b) Heap of a T-Avoiding element

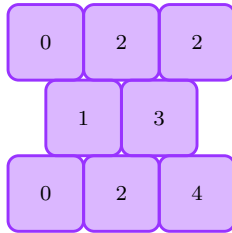Figure 5: Heaps of an element with Property-T and a T-Avoiding element

Figure 6: Heap of a non-trivially T-Avoiding element in $W(\widetilde{C}_4)$.