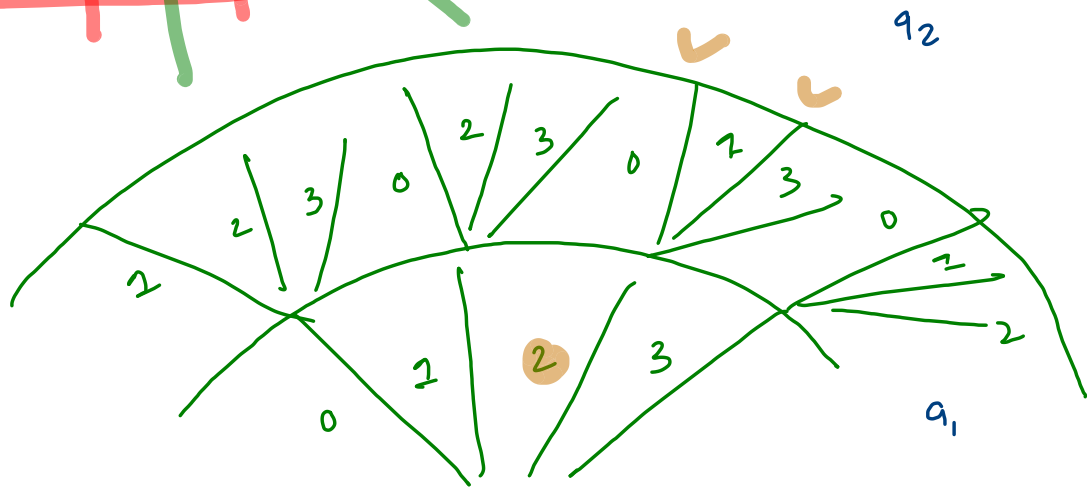
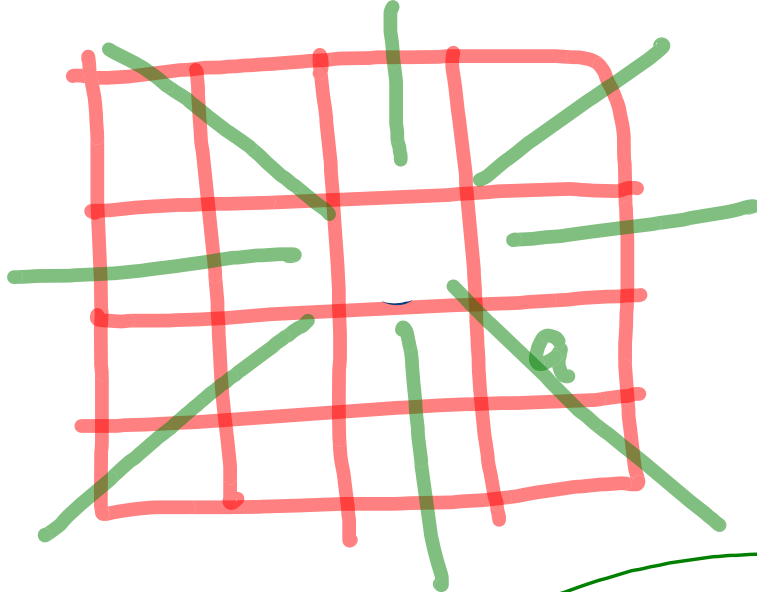


0	1
2	3

Queen-permutation



q	
q	

$$N = 2$$

$$n = 4$$

$$s = 2$$

00-10

00-11

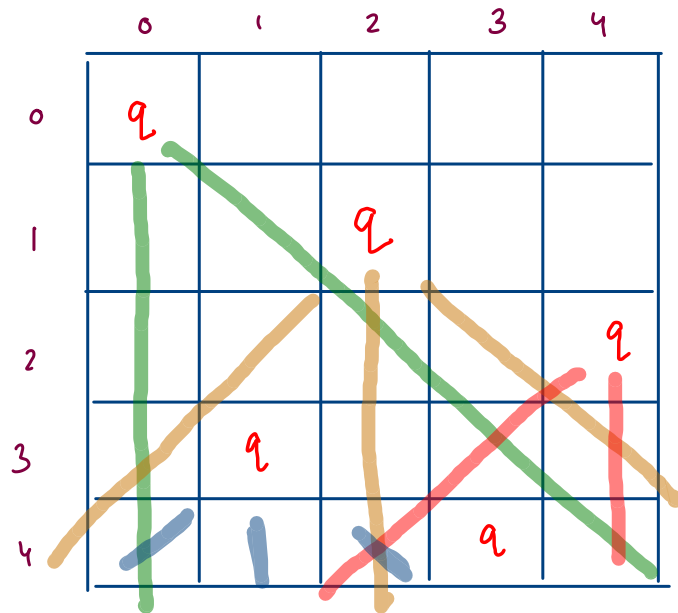
q-
q-

q-
-q

-q
q-

-q
-q

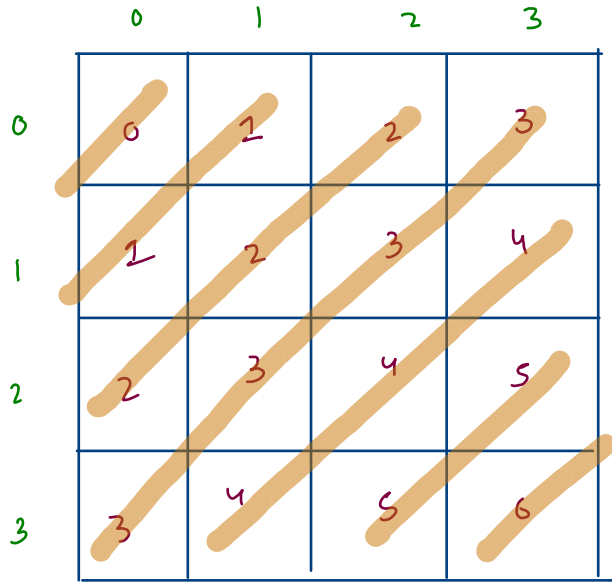
1
rows
0



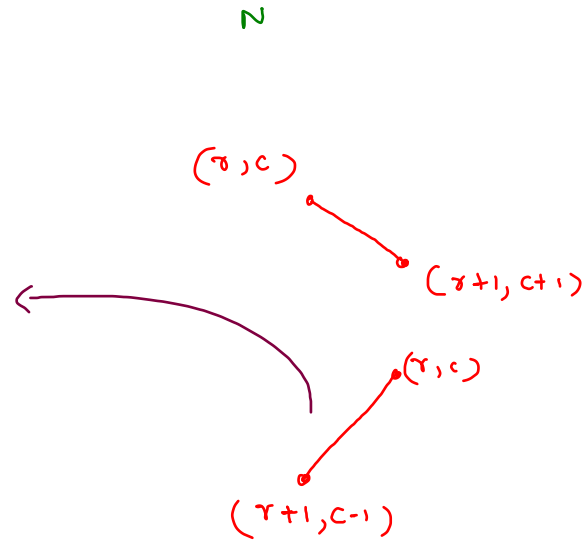
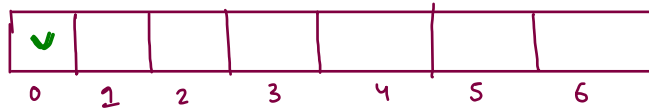
cols
↙

✓	✓	✓	✓	✓
---	---	---	---	---

rows
↘



total diagonals / $\rightarrow 2N - 1$



cols $\rightarrow 0$

diagonal $\rightarrow 0$

r, c to d

$$d = r + c$$

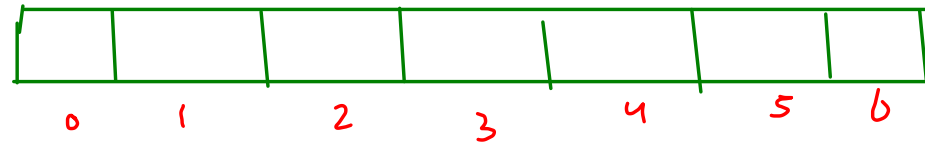
	0	1	2	3
0	0 3	-1 2	-2 1	-3 0
1	1 4	0 3	-1 2	-2 1
2	2 5	1 4	0 3	-1 2
3	3 6	2 5	1 4	0 3

(r, c)
 $(r+1, c+1)$

$r - c$

$$t \cdot d = 2^x N - 1$$

$$\underline{(r - c) + (N - 1)} \quad (r, c \text{ to } d)$$



regular - diagonal

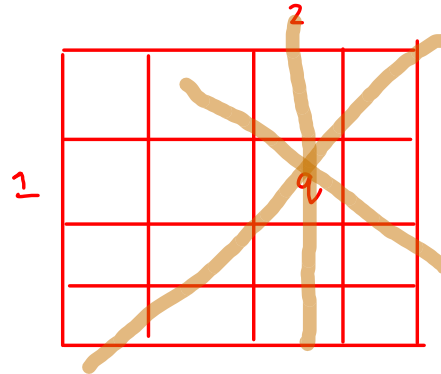
	0	1	2	3
0	0	1	2	3
1	1	2	3	4
2	2	3	4	5
3	3	4	5	6

reverse - diagonal

	0	1	2	3
0	3	2	1	0
1	4	3	2	1
2	5	4	3	
3	6	5	4	3

$d \rightarrow r + c$

(r, c)
 $(r+1, c-1)$



r, c

$r+1, c+1$

$d \rightarrow r - c + N - 1$

cols $\rightarrow 2$

rows $\rightarrow 2$

rd $\rightarrow 3$

0 1 2 3

0 1 2 3

0	q			
1				q
2		q		
3				

(2,1)

$c \rightarrow 1$

$rd \rightarrow 3$

$rowd \rightarrow 4$

cols

✓	0	✓	1	2	✓	3
---	---	---	---	---	---	---

rd

✓	0	1	2	✓	3	✓	4	5	6
---	---	---	---	---	---	---	---	---	---

rowd

0	✓	2	2	✓	3	✓	4	5	6
---	---	---	---	---	---	---	---	---	---

$r+c$

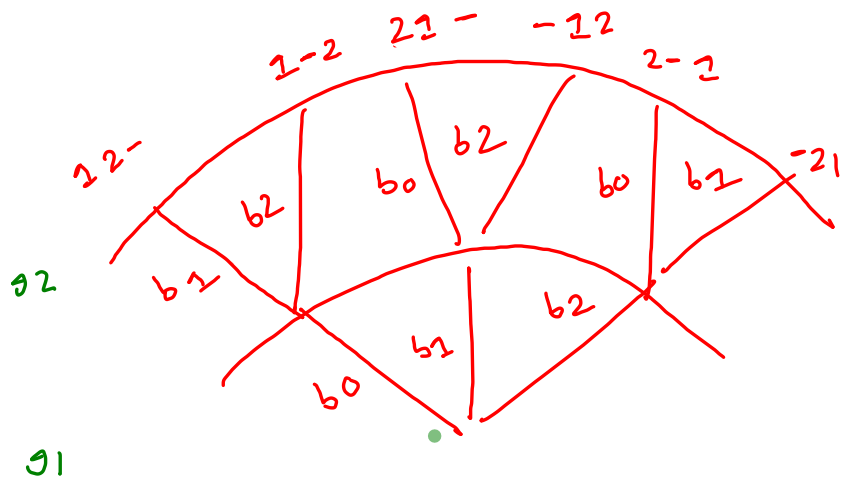


$r-c + N-1$

$\rho_1 \rightarrow$ words


$$it = 2$$

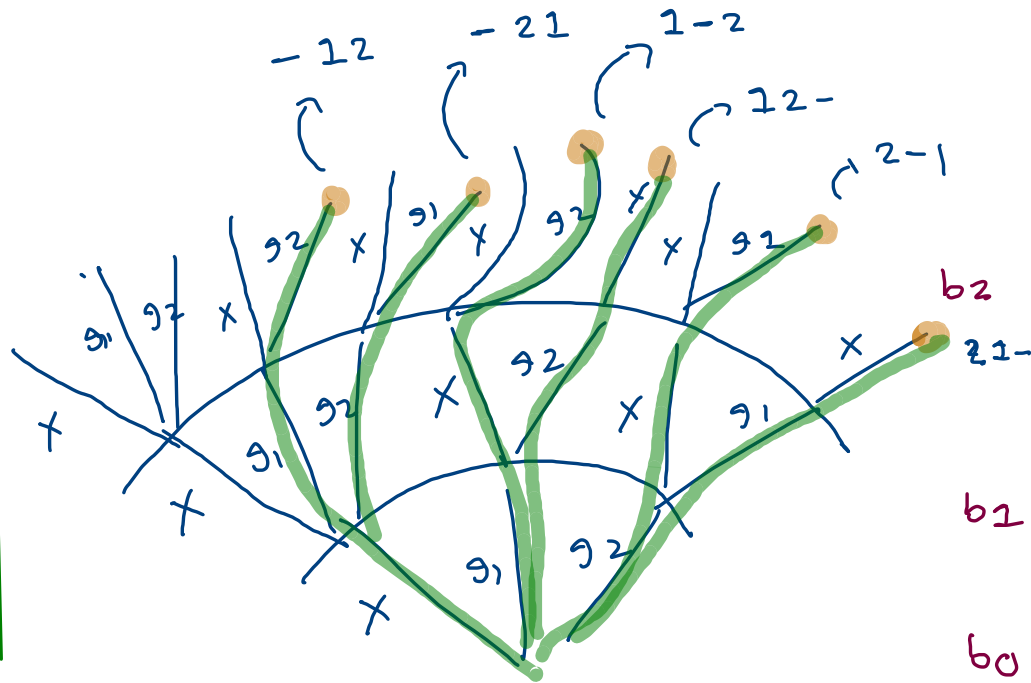

P1



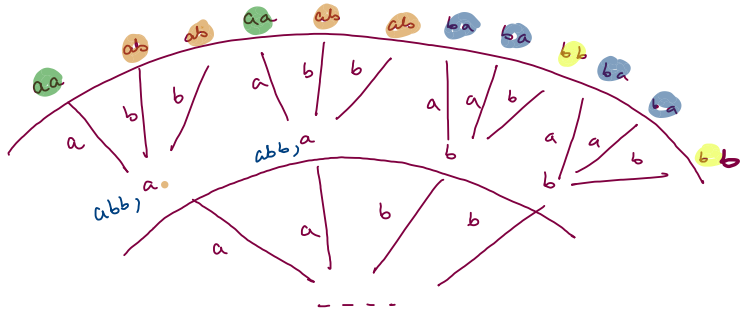
aabb



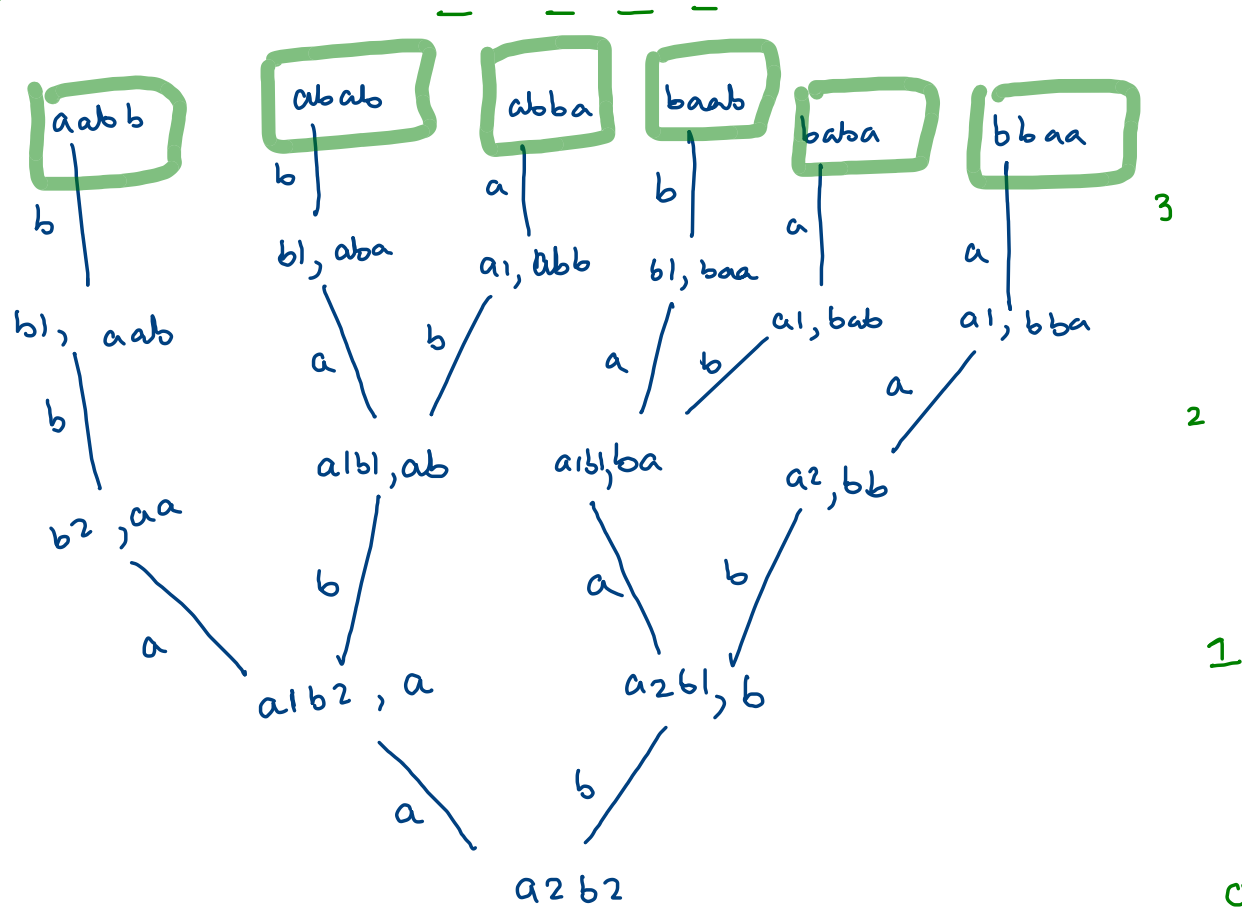
P2

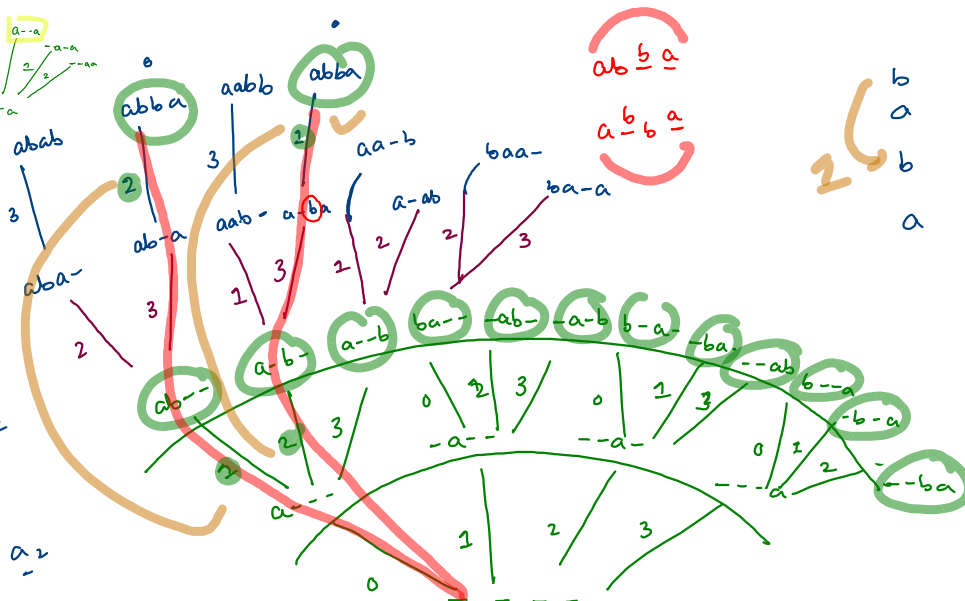
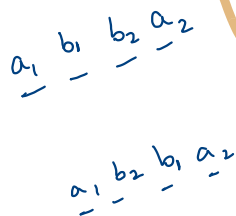
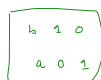


aabb



aabb





b
b
a
a

item

