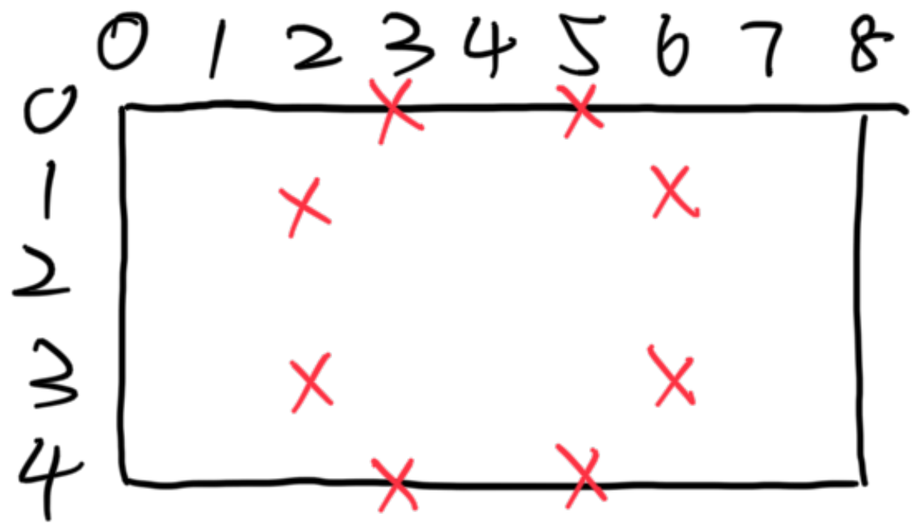


	0	1	2	3	4	5	6	7	8
0	0	0	0	X	3	X	5	5	1
1	0	0	X	3	3	3	X	4	1
2	0	0	0	0	X	3	3	3	1
3	0	0	X	0	0	0	X	2	1
4	0	0	0	X	0	X	1	1	1

4×8

2×4

	0	1	2	3	4	5	6	7	8
0	1	1	1	X	0	X	0	0	0
1	1	2	X	0	0	0	X	0	0
2	1	3	3	3	X	0	0	0	0
3	1	4	X	3	3	3	X	0	0
4	1	5	5	X	3	X	0	0	0

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

6×6

3×3

dp[i][j]

= dp[i-1][j]

+ dp[i][j-1]

dp[i][j]

4	1	×	1	1	1	3
5	1	1	×	1	×	3
6	1	2	2	3	3	6

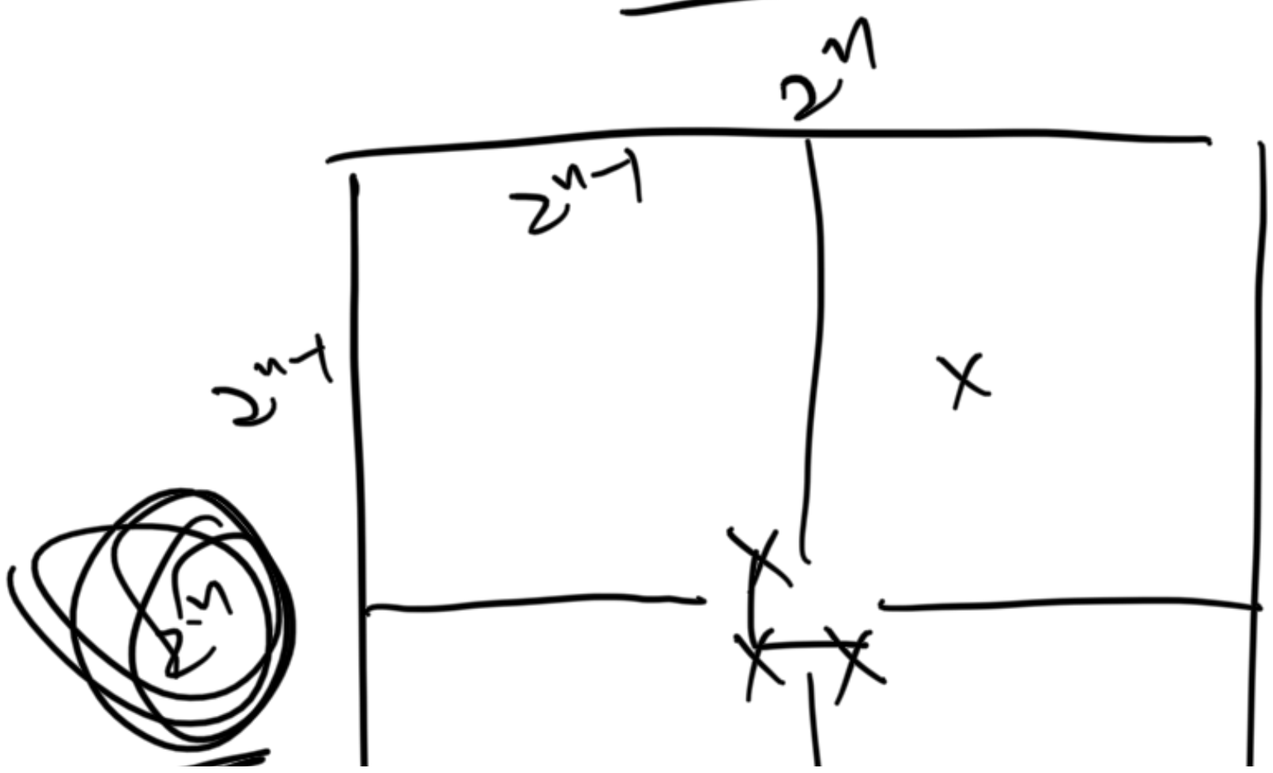
M(0,0) 走到 (i,j) 的方法数

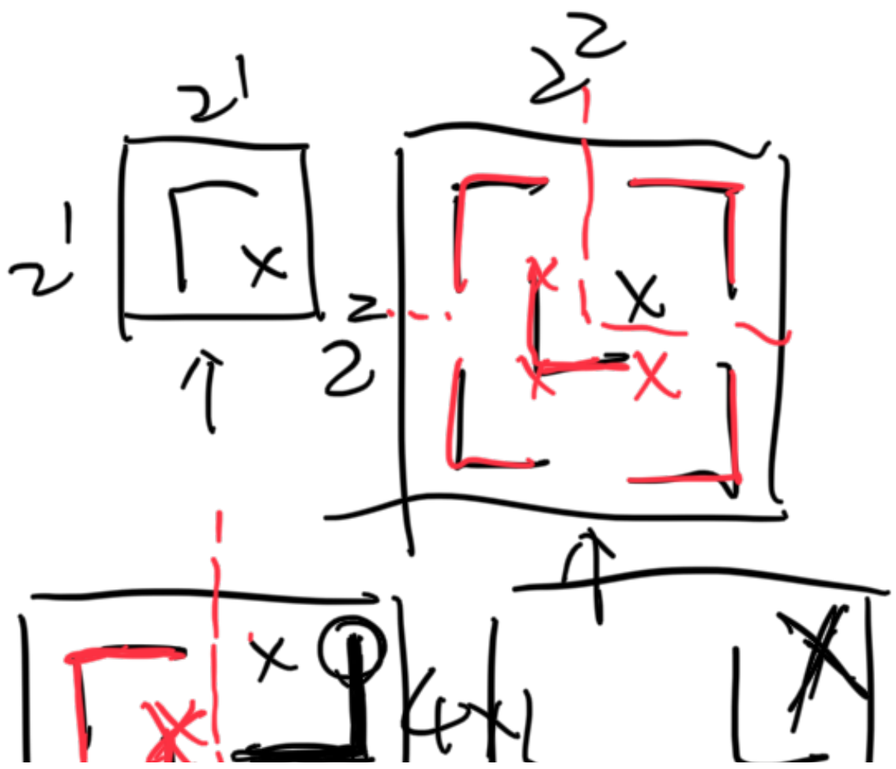
dp[a][b][c][d]

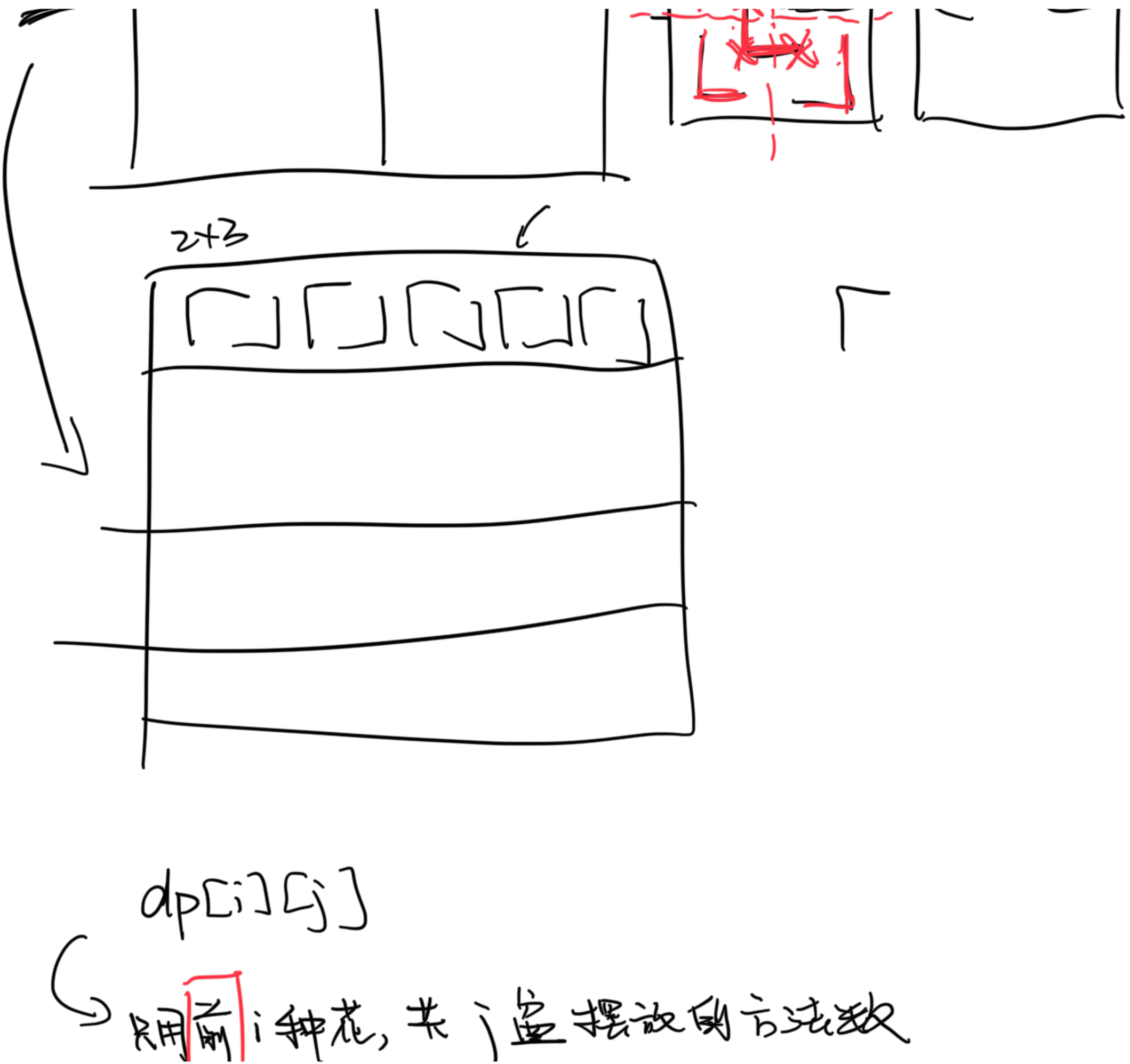
a, b, c, d → a-1, b, c, d

→ a, b-1, c, d

状态转移方程






2+3
dp[i][j]
只用前i种花，共j盆摆放的方法数

n=2 m=4.

3 2.

A B

A B

A

AABB

AAHB

dp | 0 1 2 3 4

1 1 1 1 1

2 1 2 3 3 2

BB

A

B

AA

BB

AAA

AAB

ABB

AAAB

AABB

dp[1][2]

前1种花放2个位

BB

为2种花 放到 4个位置

1种花

2个位置

B

1种花

2个位置

B B

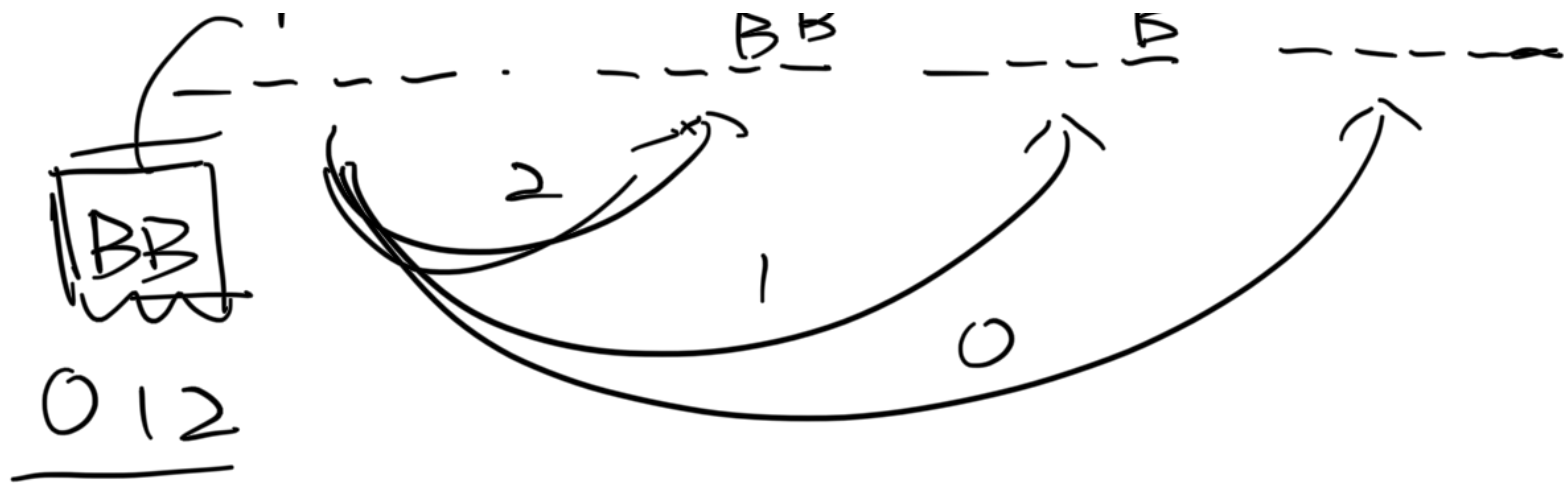
R能用前1种花 放2个位置

2种花

4个位置

$$dp[2][4] = dp[1][2] + dp[1][3] + dp[1][4] + \cdots$$

1种花2个　1种3个　1种4个



$\rightarrow dp[2][3] = dp[1][3] + dp[1][2] + dp[1][1]$

— — —

$\rightarrow dp[2][2] = dp[1][1] + dp[1][2] + dp[1][0]$

$\rightarrow dp[2][1] = dp[1][1] + dp[1][0]$

$a[i]$.

$$dp[2][j] = dp[1][j] + dp[1][j-1] + \cdots + dp[1][j-a[2]]$$

$= dp[i][j] + \cdots + dp[i][\max(0, j-a[i])]$

$dp[i][j] = dp[i-1][j] + dp[i][j-1]$

$+ \cdots + dp[i-1][j-a[i]]$

i : 2 ~ n

j : 0 ~ m

②

```
dp[i][j]=0
for(int k=0; k<=a[i]; k++)
    if(j-k<0) break;
    dp[i][j] += dp[i-1][j-k]
```

①

```
for(int i=0; i<=a[1]; i++)
    dp[1][i]=1
```

dp(n)(m)

```
for(i (~3)
    for(j 0~70)
```

0 ~ t[i]-1

t[i]-1

dp[3][70]
= max dp[2][70],
dp[2][70-1] + 2

	0	1	2	3	4
71 100	1	0	0	0	0
69 1	2	0	0	0	0
1 2	3	0	2	2	2

dp[i][j] = dp[i-1][j]

dp[2][69] = max(dp[1][69], dp[1][69-69] + 1)

+1 +1

	68	69	70
	0	0	0
	0	1	1
	2	2	3

+0 +0 +2

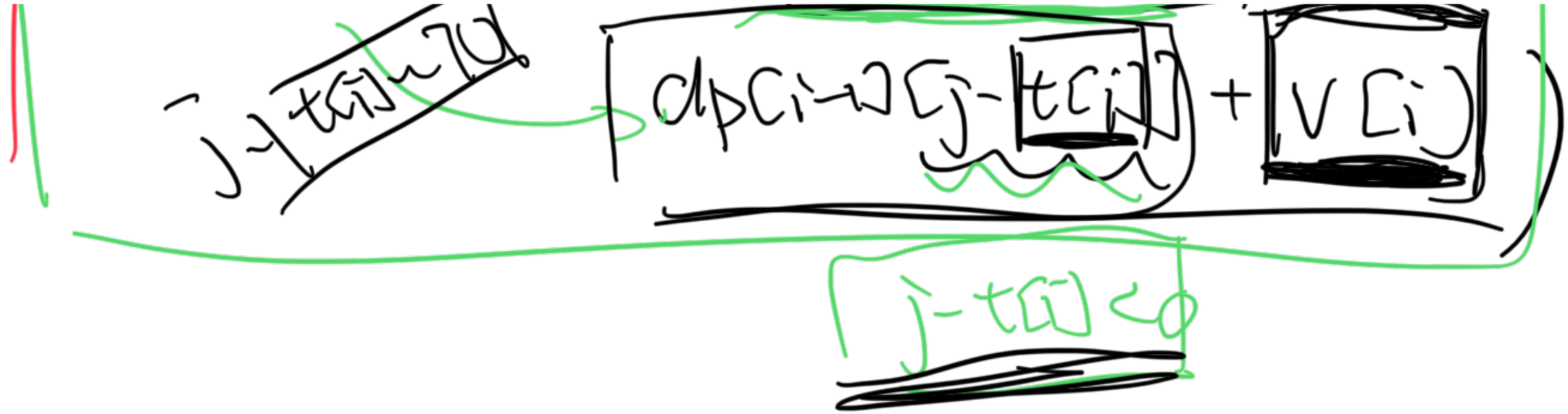
dp[3][1] = max(dp[2][1], dp[2][1-1] + 2)

t V

for(int i=1; i<=n; i++)
for(int j=m; j>=v[i]; j--)
dp[i][j] = max(dp[i-1][j], dp[i-1][j-v[i]] + w[i])

dp[i][j] = max(dp[i-1][j], dp[i-1][j-a[i]] + v[i])

dp[i][j] = max(dp[i-1][j])



	0	1	2	3	4	- -	—	—	—	68	69	70
1	0	0	0	0	0					0	0	0
2	0	0	0	0	0					0	1	0
3	0	2	0	0	0					0	1	3

dp[i][j]

Ht= j

70