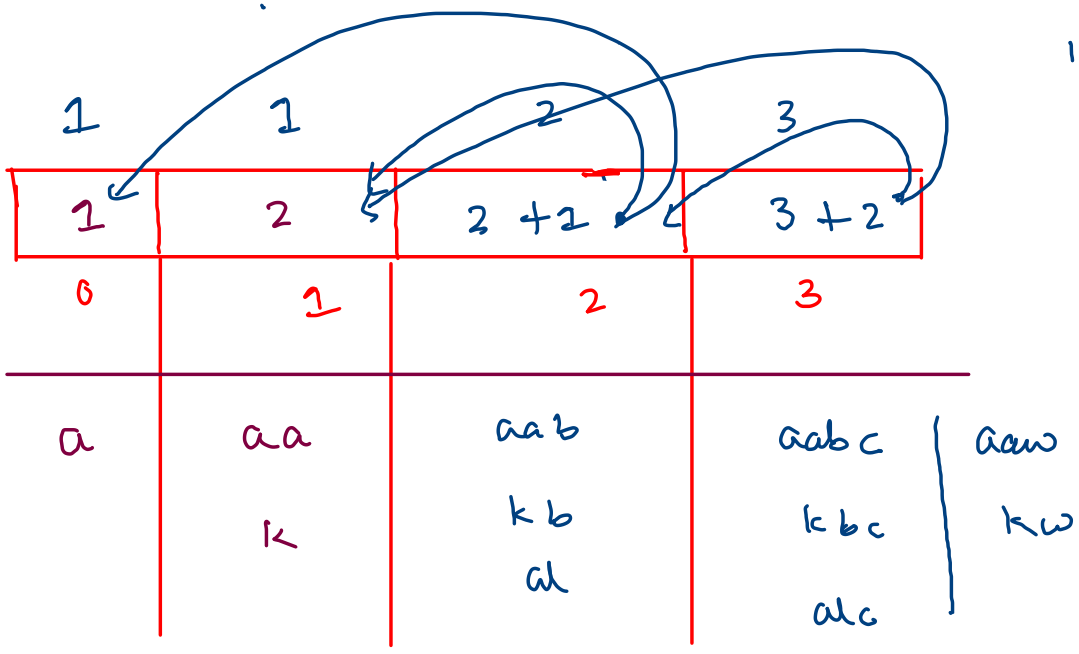
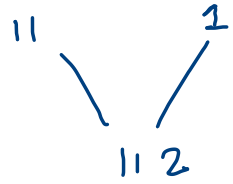
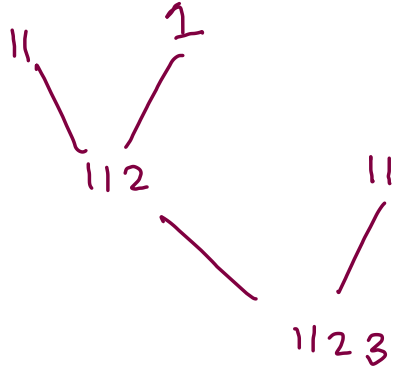

1
1
2
3
1
2
2 +1
3 +2
0
1
2
3
a
aa
aab
aabc
aaw
k
kb
kbc
kw
al
alc

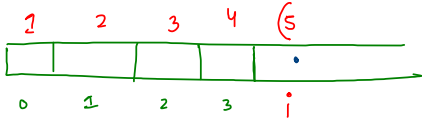

11
1
112


11
1
112
11
1123

Str → 1 1 2 4 5 0 3 0 6

1	1	2	4	5	0	3	0	6
1	2	3	5	5	0	0	0	0
0	1	2	3	4	5	6	7	8
a	aa k	aab kb al	aabd kbd ald aax kx	aabde kdde alde aaxe kxe				

1124
5-e 4
1245

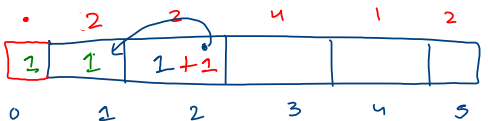


i nz , i-1 nz → dp[i-1] + dp[i-2] (i, i-1 middle) num ≤26

i nz , i-1 z → dp[i-1]

i z , i-1 nz → dp[i-2] (i-1 → 1,2

i z , i-1 z → 0

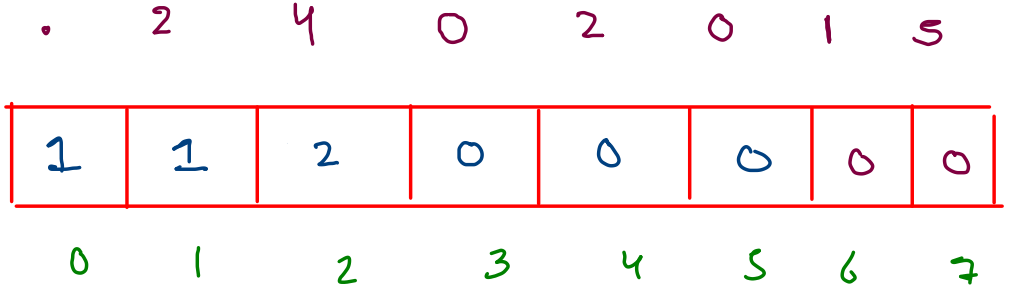


```java
for(int i=2; i < str.length();i++) {
    char c = str.charAt(i); //ith character
    char p  = str.charAt(i-1); //i-1 th character

    if(c == '0' && p == '0') {
        dp[i] = 0;
    }
    else if(p == '0') {
        dp[i] = dp[i-1];
    }
    else if(c == '0') {
        if(p == '1' || p == '2') {
            dp[i] = dp[i-2];
        }
    }
    else {
        dp[i] = dp[i-1];

        int num = (p-'0')*10 + (c-'0');

        if(num <= 26) {
            dp[i] += dp[i-2];
        }
    }
}
```



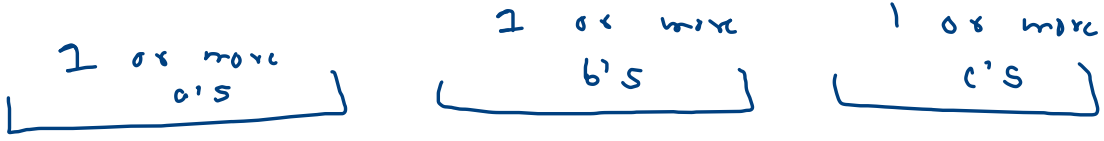
90 → 90

→ 9 0

str -> a b c d á b' c'

ans -> [abc , a b b' c , ab' c' , a a' b' c' ,

a' b' c' , a b c c' , ab c']



a+ -> 1 or more occr.

a, aa, aaa, ...

a+b+ -> ab, aab, abb

a+b+c+ -> aabc, abcc,

Str → a b c d a' b' c'

	a	b	c	d	a'	b'	c'
a+	a 1	a 1	a 1	a 1	3 aa' a a'	3 aa' a a'	3 aa' a' a'
a+b+	0	ab 1	ab 1	ab 1	1 ab	3 + 2 aa'b' ab' a'b' abb' ab	5 aa'b' ab' a'b' abb' ab
a+b+c+	0	0	abc 1	abc 1	abc 1	abc 1	5+2 aa'b'c' ab'c' a'b'c' abb'c' abc' abcc' abc

Str → a b c d a' b' c'

$na = 2 * oa + 1$

	a	b	c	d	a'	b'	c'
a+	1 (a)	1 (a)	1 (a)	1 (a)	3 (aa' a a')	3 (aa' a a')	3 (aa' a a')
a+b+	0	1 (ab)	1 (ab)	1 (ab)	1 (ab)	5 (aa'b' ab' a'b' ab abb')	5 (aa'b' ab' a'b' ab abb')
a+b+c+	0	0	1 (abc)	1 (abc)	1 (abc)	1 (abc)	7 (aa'b'c' abc aab'c' abc' a'b'c' abc'c' abb'c')

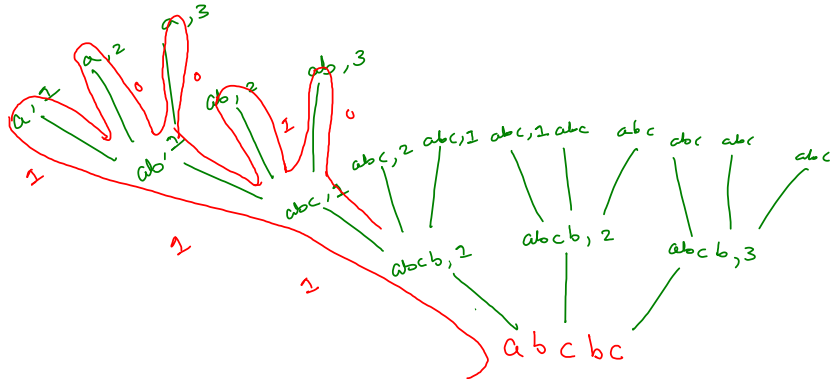
oa

$nab = oab + oabc * 2$

$oabc$

oab

$nab = oa + oab * 2$



1 → a+

2 → a+b+

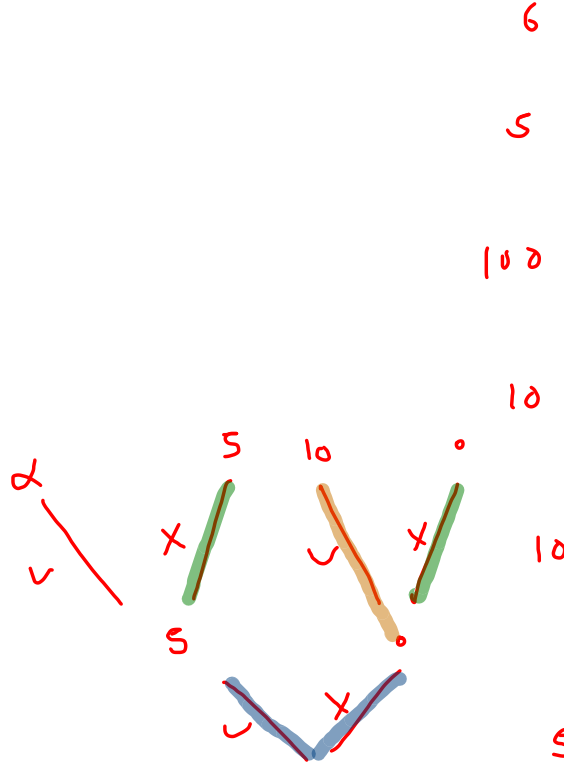
3 → a+b+c+

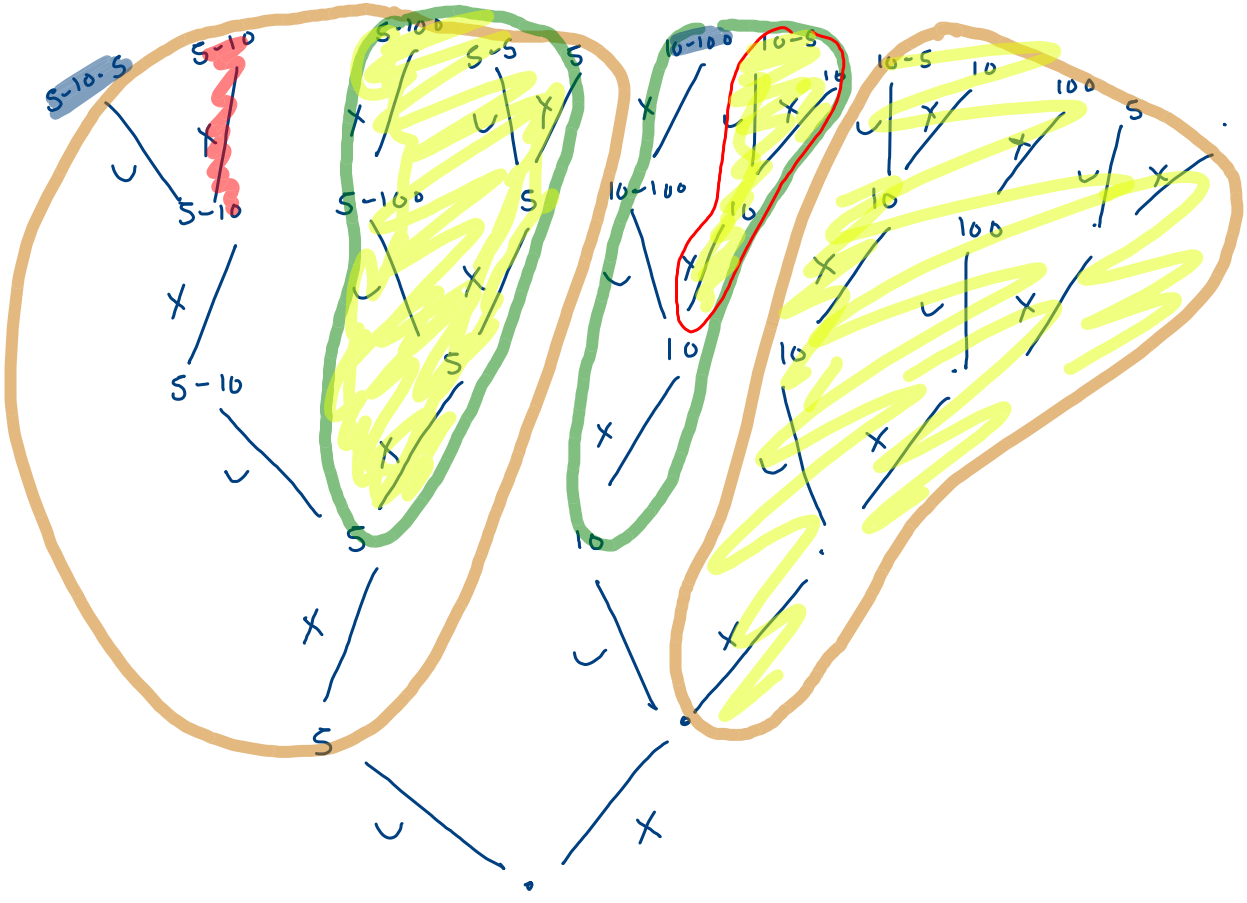
6
5
10
10
100
5
6

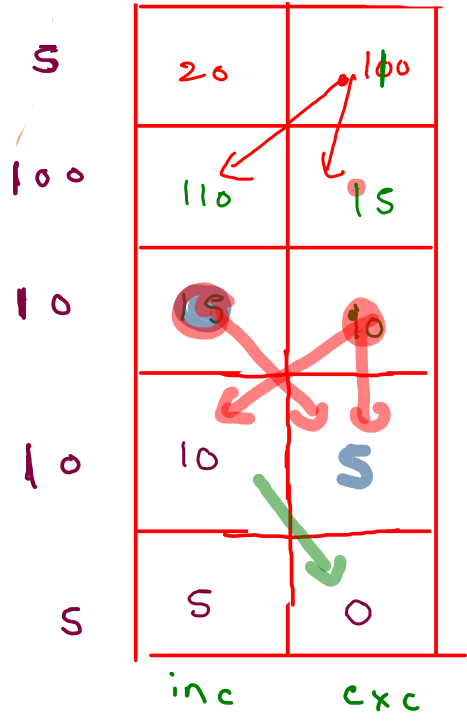
5	10	10	100	5	6
0	1	2	3	4	5

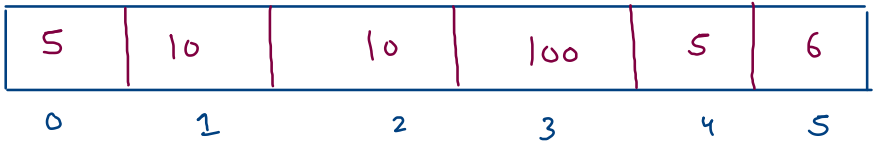
	5	10	10	100	5	6
inc	5	10	15	110	20	116
exc	0	5	10	15	110	110

valid -> non-adjacent elements



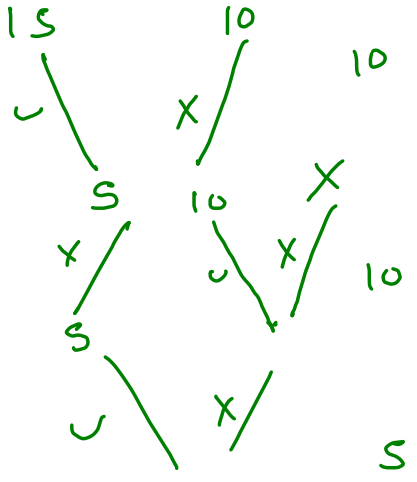

5-10.5
5-10
5-10
5-10
5-100
5-5
5
5-10
5
10-100
10-100
10-5
10
10-5
10
100
5
10
100
10
10
10
10
5
5
5


5
100
10
10
5
20
100
110
15
5
10
10
5
5
0
inc
exc

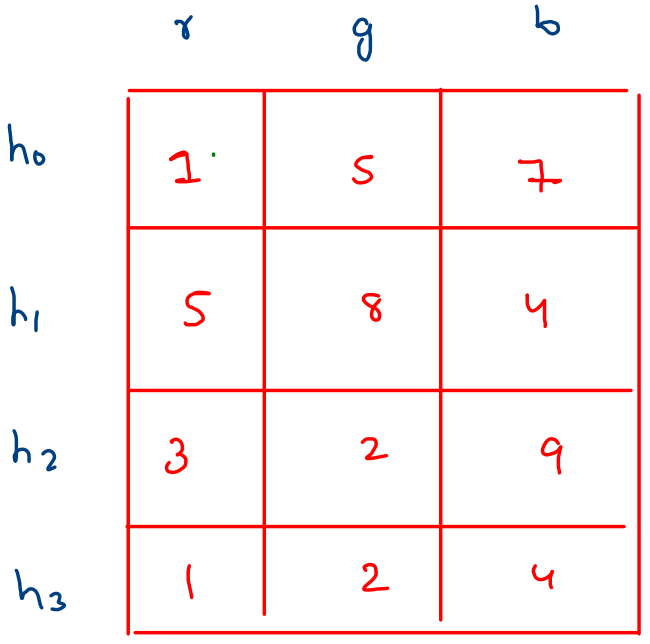


	5	10	10	100	5	6
inc	5	10	15	110	20	116
exc	0	5	10	15	110	110

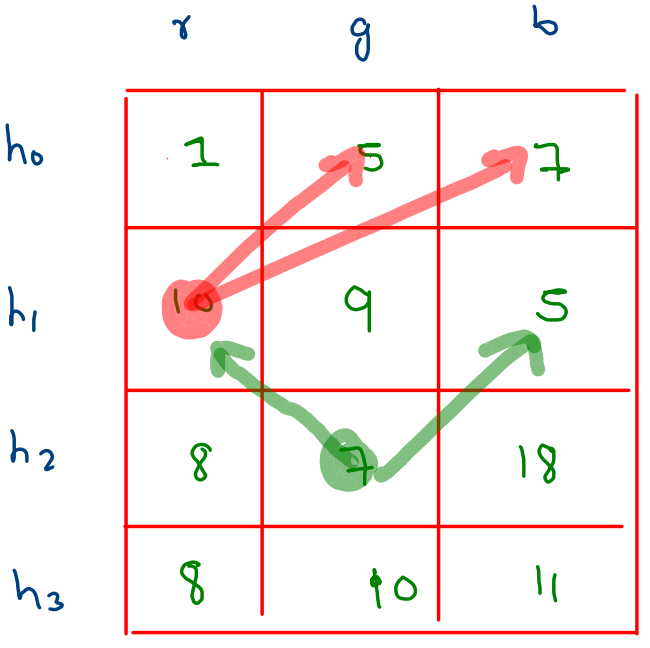
116



```
4
157
584
329
124
```



cost



Dp

	r	g	b	v
h_0	10	5	7	8
h_1	7	8	4	2
h_2	3	2	9	6
h_3	1	6	4	9
h_4	4	3	8	1

$n = 5$

$c = 4$

	r	g	b	v
h_0	10	15	7	8
h_1	12	15	9	7
h_2				
h_3	10	2	8	9
h_4	6	11	10	3

~~om = 7~~

~~osm = 9~~

nm = ∞

nsm = ∞

om = ~~2~~ 3

osm = ~~8~~ 6

nm = ~~∞~~ ~~6~~ 3

nsm = ~~∞~~ 6

n x m x m