	0	1	2	3	4	5	6	7	8	9
	A	B	A	C	A	B	A	B	A	C

ABACABABAC

Pi | 0 0 1 0 1 2 3 2 3 4

ABACAB

ABACABA

ABACABAB

ABACABAB

ABACABABA

i	A B A C A B A B A C
P[i]	0 0 1 0 1

A A
0 1
A B A B A
0 0 1 2 3

A B

↓ ↓
A A

ABACA

ABA
ABAC

ABAB
ABABA

i	A B A C A B A B A C
Pi[i]	0 0 1 0 1 2 3 2

A B A C A B

A B A C A B A C

길이 : 3

인덱스 2

A B C A B A B

A B A C A B A B

Pi ⇒ 길이

kmp.cc
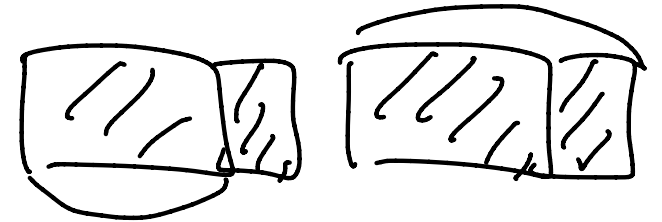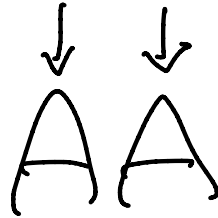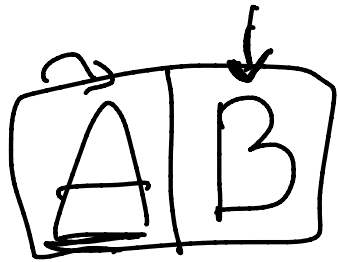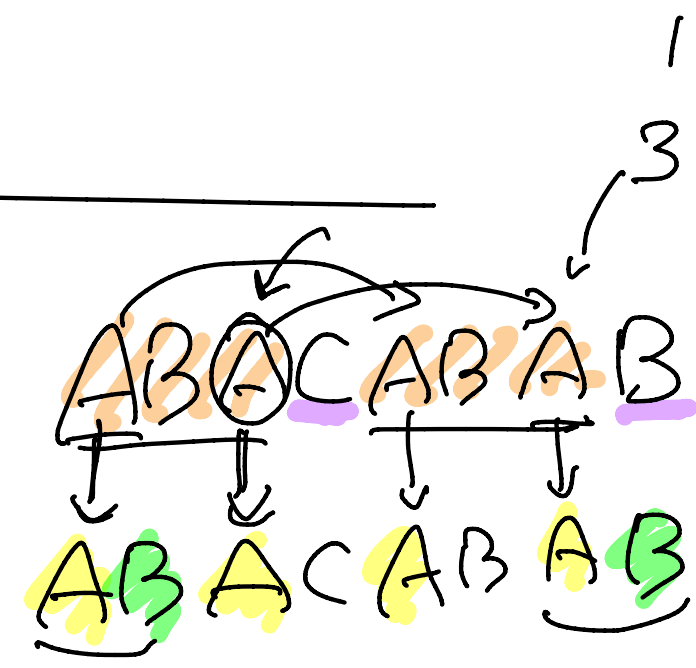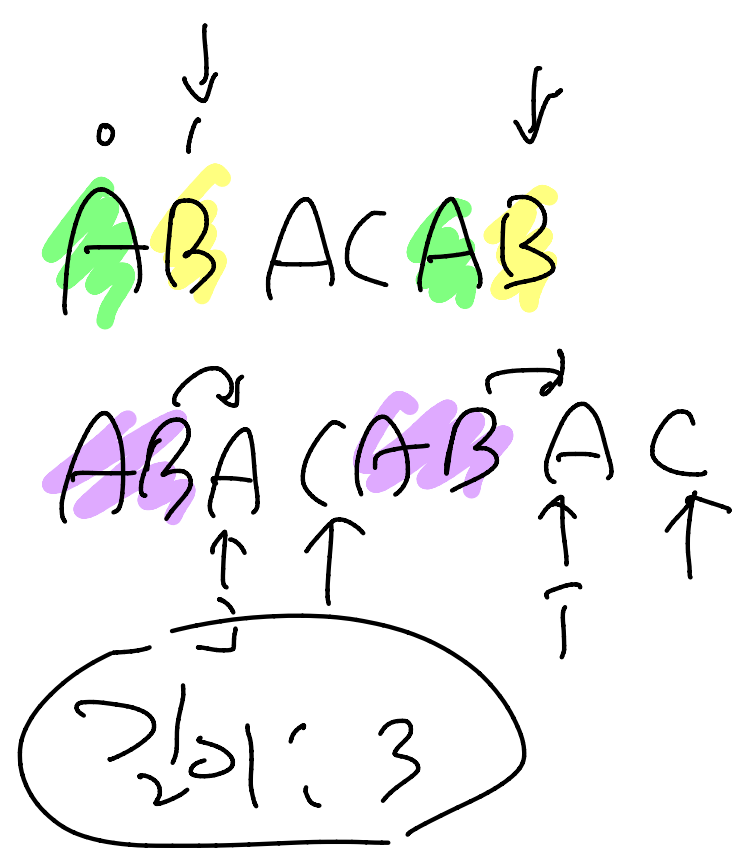
```cpp
vector<int> preprocessing(string p) {
    int m = p.size();
    vector<int> pi(m);
    pi[0] = 0;
    int j = 0;
    for (int i=1; i<m; i++) {
        while (j>0 && p[i] != p[j]) {
            j = pi[j-1];
        }
        if (p[i] == p[j]) {
            pi[i] = j+1;
            j += 1;
        } else {
            pi[i] = 0;
        }
    }
    return pi;
}
```

ABACABABAC

0 0 1 0 1 2 3 2