

回文自动机

```
struct PAM {
    int len[N], nums[N], fail[N];
    int trie[N][30], tag[N];
    int tot, last, cur, pos, n;
    string s;
    PAM(){
        tot = 1;
        last = cur = pos = 0;
        fail[0] = 1, len[1] = -1;
    }
    void build(){
        n = s.size();
        for(int i = 0; i < n; i++){
            auto getfail = [&](int x, int i) -> int {
                while(i - len[x] - 1 < 0 || s[i - len[x] - 1] != s[i]) x = fail[x];
                return x;
            };
            pos = getfail(cur, i);
            if(!trie[pos][s[i] - 'a']){
                fail[++ tot] = trie[getfail(fail[pos], i)][s[i] - 'a'];
                trie[pos][s[i] - 'a'] = tot;
                len[tot] = len[pos] + 2;
                nums[tot] = nums[fail[tot]] + 1;
            }
            cur = trie[pos][s[i] - 'a'];
            last = nums[cur];
        }
        return ;
    }
};
```