

ABC242

d.ABC Transform

A->BC B->CA C->AC

ABC BCCAAC C.... A.. 可以发现第一位是周期变化的.

$S[t][k]$ 表示S串在第t次变化的k位字母,有:

- $S[t][k] = 'A' + ('A' - S[t-1][k/2] + (k\%2 + 1))$

递归写出即可

```
using ll = int64_t;
std::string in;
int Q;
ll t,k;

char per(char x,ll t_){
    return ('A'+(x-'A'+t_)%3);
}

char solve(ll ti,ll ki){
    if(ti == 0)
        return in[ki];
    if(ki == 0)
        return per(in[0],ti);
    return per(solve(ti-1,ki/2),ki%2+1);
}

int main(){
    std::cin>>in;
    scanf("%d",&Q);
    while(Q--){
        scanf("%lld %lld",&t,&k);
        printf("%c\n",solve(t,k-1));
    }
    return 0;
}
```

E. ($\forall x \forall$)

对于串XBCBA 当第一位取A~W时,字典序一定小于原串,下一位可任意取26位. 当第一位等于原串时,第二位同理递推 即 $ans = ans * 26 + s[i] - 'A'$; 一直取到中点

再考虑原串 "CDAB" 若一直等于原串,得到的"CDDC"显然不符,需要舍去.

```

const int mod = 998244353;
int64_t ans = 0;
int n,Q;
std::string s,per;

int main(){
    scanf("%d",&Q);
    while(Q--){
        ans = 0;
        scanf("%d",&n);
        std::cin>>s;
        per = s;
        int l = 0,r = n-1;
        while(l < r){
            per[r] = per[l];
            l++,r--;
        }
        int middle = (n-1)/2;
        for(int i = 0;i <= middle;i++){
            ans *= 2611;
            ans %= mod;
            ans += (s[i] - 'A');
            ans %= mod;
        }
        ans++;
        ans %= mod;
        if(s < per){
            ans += (mod-1);
            ans %= mod;
        }
        printf("%d\n",ans);
    }
    return 0;
}

```

My Submissions

Task:	-	Language:	-	Status:	-	User:		Reset	Search
Submission Time	Task	User	Language	Score	Code Size	Status	Exec Time	Memory	
2022-03-08 17:16:50	E - (v×v)	tx995976	C++ (Clang 10.0.0)	500	833 Byte	AC	474 ms	4896 KB	Detail
2022-03-08 17:15:03	E - (v×v)	tx995976	C++ (Clang 10.0.0)	0	829 Byte	WA	525 ms	4892 KB	Detail
2022-03-07 23:14:30	D - ABC Transform	tx995976	C++ (Clang 10.0.0)	400	544 Byte	AC	88 ms	3384 KB	Detail
2022-03-05 21:28:00	C - 1111gal password	tx995976	C++ (Clang 10.0.0)	300	1108 Byte	AC	65 ms	81336 KB	Detail
2022-03-05 20:46:20	B - Minimize Ordering	tx995976	C++ (Clang 10.0.0)	200	465 Byte	AC	16 ms	3448 KB	Detail
2022-03-05 20:34:24	A - T-shirt	tx995976	C++ (Clang 10.0.0)	100	383 Byte	AC	10 ms	3164 KB	Detail