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Statement
Submissions

Your score not attempted

Spoilers
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solved by 20 / 24
math: combinatorics
math: number theory

Top users by time

#	User	Time
1	inionel	16 ms
2	nandonathaniel	17 ms
3	albertnugroho128	22 ms
4	Raphela	24 ms
5	irdacin	28 ms

Top users by memory

#	User	Memory
1	bagasangga	776 KB
2	nandonathaniel	836 KB
3	inionel	4616 KB
4	albertnugroho128	4616 KB
5	vjudge3	4932 KB

Submission #4526115

Arkavidia 9.0 - Penyisihan CP / J. Jurnal Koprima

Accepted • Retr0Foxx • C • October 22, 2025 at 17:16:02

▸ Sample Test Data Results

▸ Test Data Results

```c
#include <stdio.h>

#define MAXN 1000005
#define MOD (int)(1e9+7)
#define printf
#define ll long long
#define getchar getchar_unlocked

ll powmod(ll x, ll p)
{
    ll res = 1;
    ll a = x;
    while (p)
    {
        if (p & 1) res = ((ll)res*a) % MOD;
        a = ((ll)a*a) % MOD;
        p /= 2;
    }
    return res;
}

int lp[MAXN];
int primes[MAXN];
int last_index[MAXN];
ll contrib[MAXN];
int n_primes;
int np;

int getint()
{
    int c;
    while ((c = getchar()) < '0' || c > '9');
    int res = 0;
    do
    {
        res *= 10;
        res += c - '0';
    } while ((c = getchar()) >= '0' && c <= '9');
    return res;
}

signed main()
{
    int cnt = 0;
    for (int i = 2; i <= 1000000; ++i)
    {
        if (lp[i] == 0)
        {
            lp[i] = i;
            primes[++n_primes] = i;
        }
        for (int j = 1; j <= n_primes && primes[j]*i <= 1000000; ++j)
        {
            if (primes[j] > lp[i]) break;
            lp[primes[j]*i] = primes[j];
            ++cnt;
        }
    }

    int n = getint();

    int contrib_a = 1;
    for (int i = 1; i <= n; ++i)
    {
        int cp = getint();
        int woah = cp;
        if (cp == 1) continue;

        do
        {
            int pr = lp[cp];
            int sz = i - last_index[pr] - 1;
            contrib[pr] += (ll)sz*(sz+1)/2;
            last_index[pr] = i;
            while (cp % pr == 0) cp /= pr;
        } while (cp > 1);
        contrib_a = (((ll)contrib_a * powmod(woah, (ll)i*(n - i + 1))) % MOD;
    }
    int contrib_b = 1;
    for (int i = 2; i <= 1000000; ++i)
    {
        if (lp[i] != i) continue;
        int fincon = ((ll)n*(n+1)/2 - (ll)(contrib[i] + (ll)(n - last_index[i])*(n - last_index
        contrib_b = (ll)contrib_b * powmod((1 - powmod(i, MOD-2) + MOD) % MOD, fincon) % MOD;
    }
    int yes = 0;
    int res = (ll)contrib_a * contrib_b%MOD;
    if (res == 0)
    {
        putchar('0');
    }
    else
    {
        for (int p10 = 1000000000; p10 >= 1; p10/=10)
        {
            if (yes || (res/p10))
            {
                yes = 1;
                putchar('0' + res/p10);
            }
            res -= p10*(res/p10);
```

```
102         }
103     }
104     putchar(0xa);
105     return 0;
106 }
```