

RCbits.cpp

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//RCbits
#include <stdio.h>
#include <string.h>
#include <stdlib.h>
#include <time.h>
#include <sys/timeb.h>

#define M 5000
#define N 1100000

char *tzstr = " TZ=JST-9";

int ceil(int a, int b);

main()
{
    FILE *r, *c;
    r = fopen("ListCSRS.txt", "r");
    c = fopen("ListCSRSC.txt", "w");
    int m, n, i, j, k, ww;
    unsigned int G[N][(M / 32) + 1];
    int cst[N], rh[M], ch[N], cname[100000], rname[200];

    fscanf(r, "%d %d", &m, &n);

    struct timeb st, et, tt;
    putenv(tzstr);
    tzset();
    ftime(&st);

    if(m > M || n > N)
        printf("ERROR 110: m = %d M = %d n = %d N = %d\n", m, M, n, N);

    printf("m = %d n = %d\n", m, n);

    for(k = 0;k < n;k++)
        fscanf(r, "%d", &cst[k]);

    for(i = 0;i < ceil(m, 32);i++)
        for(j = 0; j < n; j++)
            G[j][i] = 0;

    for(k = 0;k < m;k++) {
        fscanf(r, "%d", &rh[k]);
        for(i = 0;i < rh[k];i++) {
            fscanf(r, "%d", &cname[i]);
            G[cname[i] - 1][k / 32] = G[cname[i] - 1][k / 32] | (1U << (31 - (k % 32)));
        }
    }

    fprintf(c, "%d %d\n", m, n);
    for(i = 0;i < n;i++) {
        ch[i] = 0;
        for(j = 0;j < m;j++)
            ページ(1)
    }
}

```

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{
    ww = G[i][j / 32];
    ww = (ww << (j % 32));
    if(ww < 0) {
        rname[ch[i]] = j + 1;
        ch[i]++;
    }
}
fprintf(c, "%d %d", cst[i], ch[i]);
for(k = 0;k < ch[i];k++)
    fprintf(c, "%d", rname[k]);

fprintf(c, "\n");
fclose(r);
fclose(c);

ftime(&et);
tt.time = et.time - st.time;
printf("et.time = %d tt.time = %d\n", et.time, tt.time);
}

int ceil(int a, int b) {
    if(a % b)
        return (a / b) + 1;
    return a / b;
}

```