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/*This is a program code to read date from a file with matrix information*/
#include <stdio.h>
#include <stdlib.h> //need to be included
#include "../new_util/nrutil_new.c"

#define SIZE_V 5
#define NUM_R 5
#define NUM_C 3

int main(void)
//int main(int argc, char *argv[])
{
    FILE *fp1, *fp2;
    double *vector_test;
    double **matrix_test;

    int i, j, k;

    vector_test = d_vector(SIZE_V); //allocation of memory
    matrix_test = d_matrix(NUM_R, NUM_C); //allocation of memory

    //if(argc != 3) message_error("Number of parameter is incompatible.");
    //fp1 = fopen(argv[1], "r");
    //fp2 = fopen(argv[2], "r");

    fp1 = fopen("vector_test2.dat", "r");
    fp2 = fopen("matrix_test2.dat", "r");

    if (fp1 == NULL) message_error("File cannot be opened.");
    if (fp2 == NULL) message_error("File cannot be opened.");

#ifdef VECTOR
    for(i = 1; i <= SIZE_V; i++) {
        fscanf(fp1, "%lf,", &vector_test[i]); //for file with comma separation
    }

    for(i = 1; i <= SIZE_V; i++) {
        printf("%lf\n", vector_test[i]);
    }
#endif
//end if of VECTOR

#ifdef MATRIX
    for(i = 1; i <= NUM_R; i++) {
        for(j = 1; j <= NUM_C; j++) {
            fscanf(fp2, "%lf;", &matrix_test[i][j]);
        }
    }

    for(i = 1; i <= NUM_R; i++) {
        for(j = 1; j <= NUM_C; j++) {
            printf("%lf\t", matrix_test[i][j]);
        }
        printf("\n");
    }
#endif
//end if of MATRIX
```

```
free_d_vector(vector_test);    //must release memory space!!
free_d_matrix(matrix_test);    //must relecase memory space!!
close(fp1);
close(fp2);
return 0;
}
```