
TASK 2 - Understanding Design Patterns in C

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matrix.h

```
#ifndef MAT
#define MAT

typedef struct _matrix matrix_t;
matrix_t *matrix_create(matrix_t* n_i, matrix_t* n_j); //creating a new matrix
void matrix_del(matrix_t** matrix); //deleting the matrix

#endif
```

matrix.c

```
#include<stdio.h>
#include<matrix.h>

typdef struct _matrix{
        int i,j; //rows and columns
        float *value; // data
}matrix_t;

matrix_t *matrix_create(matrix_t* int n_i, matrix_t* int n_j);
{
        struct matrix_t *matrix = malloc(sizeof(matrix))
        matrix->i=n_i;
        matrix->j=n_j;
        matrix->value = malloc( i * j * sizeof(float*));
        return matrix
}

void matrix_del(matrix_t** matrix)
{
        free(matrix->value)
        free(matrix)
}
```