

Lab 7.2.1 Exceptions: simple checks

Objectives

Familiarize the student with:

- throwing exceptions;
- handling exceptions.

Scenario

Write a simple class for a matrix algebra with basic operations (methods in this class) which allow the programs to:

- create a matrix object with specific dimensions;
- fill the matrix with values;
- add values to the matrix;
- add a matrix to the matrix.

When one of the matrix parameters is empty (also in the add a value method) or the added matrices don't fit one another, you must throw an exception. In the main function: create three testing matrices, two with the same size and one with another size. Try to compute the sum of all the matrix pairs, add some try-catch blocks and an appropriate message. Print the results on the screen. What other cases should be tested?

Example input

```
2, 2, 2, 2, 3, 3
```

Example output

```
0 0  
0 0
```

```
Matrices don't fit.  
Matrices don't fit.
```