

## Programming III

### Laboratory 7

#### Objectives

- exceptions
- collections

#### Exercises

1. Create the class Student that as a name, a class that it is in class should be between [0,12] and a map that contains a subject and the notes at that subject. Notes should have values between [1,10]. Resolve the following requirements

- Implement your own Exception class
- Implement the student class and the fields that have restrictions
- Create a list of students and display the list
- Add a static function to student class that allows calculation of the mean for a student at a subject
- Sort the list of the students based on general mean
- Create a structure that can display the students that belong to same class and for each subject (for that class) the list of students that attend that subject. Ex:
  - class I:
    - Mathematics: Ionescu, Vasilescu,
    - Physics: Ionescu, Popescu
    - ...
- For each class find the student with maximum, minimum general mean
- Using find algorithm from Collections find the student that attendances most subjects