Modules and patterns

Task 1.

- Create a module for a `Telerik Academy course`
  - The course has a `title` and `presentations`
    - Each presentation also has a `title`
    - There is a homework for each presentation
  - There is a set of students listed for the course
    - Each student has `firstname`, `lastname` and an `ID`
      - IDs must be unique integer numbers which are at least 1
  - Each student can submit a homework for each presentation in the course
  - Create method `init()`
    - Accepts a `string` - course title
    - Accepts an `array of strings` - presentation titles
    - Throws if there is an invalid title
      - Titles do not start or end with spaces
      - Titles do not have consecutive spaces
      - Titles have at least one character
    - Throws if there are no presentations
  - Create method `addStudent()` which lists a student for the course
    - Accepts a string in the format `'Firstname Lastname'`
    - Throws if any of the names are not valid
      - Names start with an upper case letter
      - All other symbols in the name (if any) are lowercase letters
    - Generates a unique student ID and returns it
  - Create method `getAllStudents()` that returns an array of students in the format:
    - {firstname: 'string', lastname: 'string', id: StudentID}
  - Create method `submitHomework()`
    - Accepts `studentID` and `homeworkID`
      - homeworkID 1 is for the first presentation
      - homeworkID 2 is for the second one

        - ...
    - Throws if any of the IDs are invalid
- Create method `pushExamResults()`
    - Accepts an array of items in the format `{StudentID: ..., Score: ...}`
        - StudentIDs which are not listed get 0 points
    - Throw if there is an invalid StudentID
    - Throw if same StudentID is given more than once (he tried to cheat (:)
    - Throw if Score is not a number
- Create method `getTopStudents()` which returns an array of the top **10 performing students**
    - Array must be sorted from **best to worst**
    - If there are less than 10, return them all
    - The final score that is used to calculate the top performing students is done as follows:
        - 75% of the exam result
        - 25% the submitted homework (count of submitted homeworks / count of all homeworks) for the course