



In this HW you will compute the academic scores authors (professors) in an University.

University class contains an array of Authors and the ability to add new authors. `computeScore()` in University returns the sum of scores of each Author. University has a bidirectional relation to Author so University has an array of Authors while the Author has an University.

Author has a name and an array of Publications. `addPublication()` adds a new Publication while `computeScore()` returns the sum of all Publications.

Publication class is abstract (since we do not know how to compute the score for a generic publication). Each Publication has a name, apparition date and number of authors. The method `computeScore()` is abstract and will be overridden in the subclasses.

Journal extends Publication. In addition a Journal has a `journalName` and an `impactFactor`. For a Journal the score is computed like this: $(\text{impactFactor} * 0.5) / \text{numberOfAuthors}$.

ConferenceProceeding extends Publication. In addition a ConferenceProceeding has a `volumeName` and a boolean `indexed`. If the ConferenceProceeding is indexed, the score is computed : $0.25 / \text{numberOfAuthors}$. If the ConferenceProceeding is not indexed, the score is computed : $0.2 / \text{numberOfAuthors}$.

Implement the classes and test your program by creating two authors in the same university, each with 2 journals and 2 conference proceedings articles. Compute their score and compute the score for the whole university.