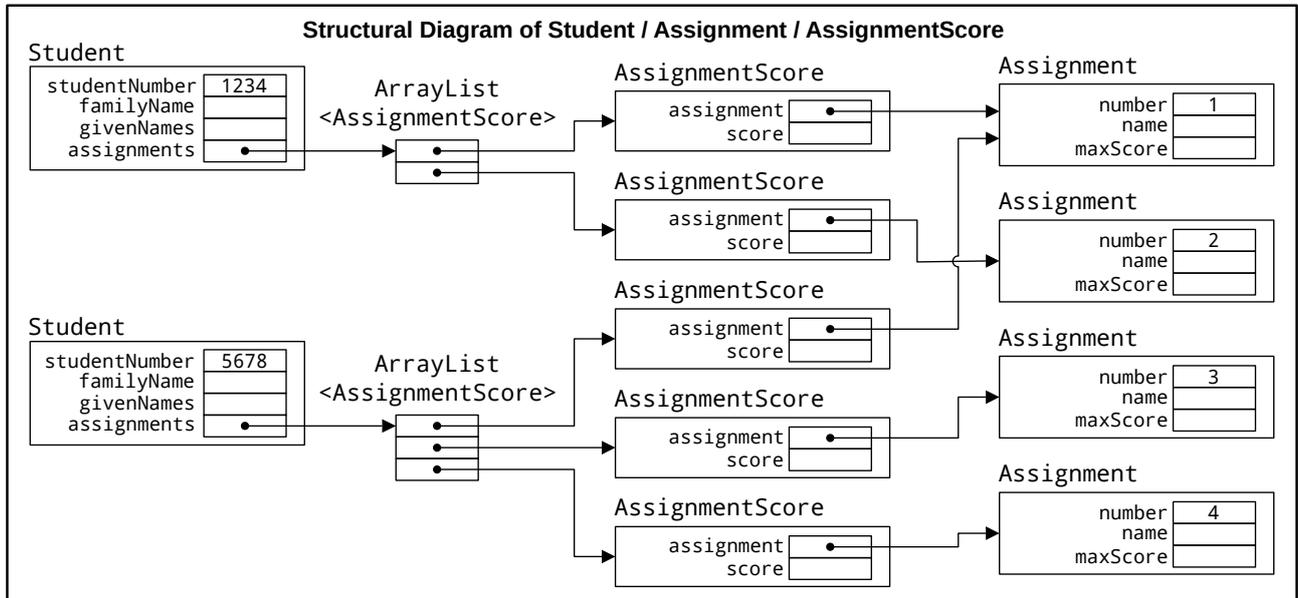


**PBL: Grade Book Part 7: class Student (update)**

This assignment continues the project to create software for a school grade book that will hold the scores that students received for their assignments.

For this part of the project, the Student class will be updated so that each Student object will contain a list of scores they received on their assignments.

Refer to the diagram below for a visual representation of the structure described in the following prose.



Each Student contains a list AssignmentScore objects. Each AssignmentScore object in the list records the given score the student received, and associates the Assignment object that provides information about the assignment. This structure prevents duplication of assignment information: for any given Assignment – multiple students will usually do the same assignment, thus a number of students will have their own individual AssignmentScore that is associated with the same Assignment object. In the diagram above, both students have completed assignment number 1.

As the list of assignments completed by any given student is not static – it will be updated as students complete new assignments. Thus, an array of AssignmentScore is perhaps not an ideal way to store the scores. For this assignment, you will be asked to store the student’s list of scores in an ArrayList of AssignmentScore.

Update the Student class according to the following specifications.

- Add a field to store the scores a given student has received for their completed assignments. As mentioned above, and shown in the diagram, implement this with an ArrayList of AssignmentScore.
- Add a method addAssignmentScore that takes as parameters and score and an Assignment object, creates a new AssignmentScore object from these, and appends that object to the end of the student’s list of assignments.
- Add a method getAssignmentScores that returns an array of AssignmentScores. To prevent the list from being modified outside of the Student class, we are returning a copy of the ArrayList. Hint: this will return an array of AssignmentScore:  
`assignments.toArray(new AssignmentScore[0]);`

Update your TestStudent class to test the new methods.