



SOUTHERN
UNIVERSITY COLLEGE
南方大學學院

Project
PROG2013 Object-Oriented Programming
2019-B Semester

Instructions:

1. Answer ALL questions.
2. Upload your source files to the submission folder on E-Learning.

Name	
Student ID	

Name	
Student ID	

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Student ID	

Question 1 (30 marks)

For this question, use the Java classes given in the lectures and the *Essay* class developed in one of the labs.

In a course, a teacher gives the following tests and assignments:

- A lab activity that is observed by the teacher and assigned a numeric score.
- A pass/fail exam that has 10 questions. The minimum passing score is 70.
- An essay that is assigned a numeric score.
- A final exam that has 50 questions.

Write a class named `CourseGrades`. The class should have a `GradedActivity` array named `grades` as a field. The array should have four elements, one for each of the assignments previously described. The class should have the following methods:

<code>setLab</code>	This method should accept a <code>GradedActivity</code> object as its argument. This object should already hold the student's score for the lab activity. Element 0 of the <code>grades</code> field should reference this object.
<code>setPassFailExam</code>	This method should accept a <code>PassFailExam</code> object as its argument. This object should already hold the student's score for the pass/fail exam. Element 1 of the <code>grades</code> field should reference this object.
<code>setEssay</code>	This method should accept an <code>Essay</code> object as its argument. This object should already hold the student's score for the essay. Element 2 of the <code>grades</code> field should reference this object.
<code>setFinalExam</code>	This method should accept a <code>FinalExam</code> object as its argument. This object should already hold the student's score for the final exam. Element 3 of the <code>grades</code> field should reference this object.
<code>toString</code>	This method should return a string that contains the numeric scores and grades for each element in the <code>grades</code> array.

Demonstrate the `CourseGrades` class in a program.

Question 2

To be released.

END