HW1: Classes and Objects (10 pts)

Define class Student with the following **private** **member variables**: name, quiz, midterm exam, and final exam grades, weighted average numeric grade, final letter grade. Letter grade should be of type char (with values ‘A’, ‘B’, etc.) or string (with values “A”, “A-“, “B+”, “B”, ”B-“ etc.)

The student class should have **public** **member functions** for each of the following tasks:

* void input(): set weights of the quizzes and exams to fixed integers (decided by a programmer, but adding up to 100%), input name, quizzes, and exam grades, then calculate weighted average and final letter grade calling calc\_ave() and calc\_letter().
* void output(): output the whole student record: name and grades.

The student class should have **private** **member functions** for each of the following tasks:

* void calc\_ave(): calculate the student’s weighted average numeric score,
* void calc\_letter(): calculate the students final letter grade.

In main function create 3 objects of class Student (could be 3 variables: Student s1, s2, s3 or array: Student s[3]), input their grades for quizzes and exams, and output their records (including weighted average and letter grades).

Test your program.

Submit code (cpp file) and output (pdf file) to Blackboard (HW1), add the name of your HW partner to the submission comment.