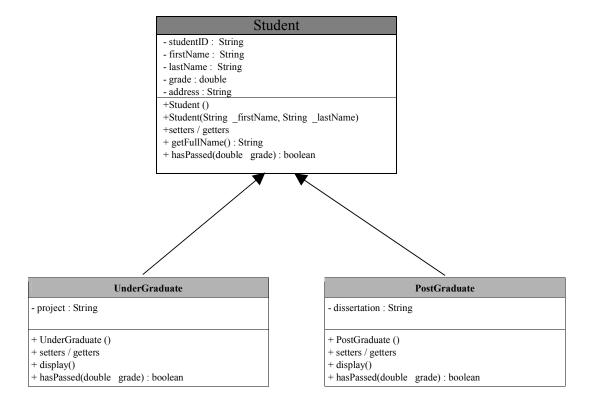
King Saud University College of Computer and Information Sciences Lab 5 Inheritance

Write Java code to implement the following inheritance hierarchy:



This **Student** super class has a method that takes grade (0 to 100) as an input argument and checks whether the student has passed.

boolean hasPassed(double grade)

The **hasPassed** method should be an empty method in the Student class.

The two subclasses **UnderGraduate** and **PostGraduate** should override this method and provide an implementation each. For the UnderGraduate class if the grade is \geq = 60.0 then this method returns true and for the PostGraduate class if the grade is \geq = 80.0 then this method returns true. In all other cases this method returns false.

Write a main test class that does the following:

- 1. Create an UnderGraduate and a PostGraduate object with the proper values of the attributes.
- 2. Display the result as returned by the hasPassed method for each of the object.