1. Write a Java program to create an interface Shape with methods: calculateArea(), calculatePerimeter(). Create classes Rectangle and Triangle that implement the Shape interface.

Homework:

Create three classes: Person, Student, and Teacher;
Person has the following members: name, gender, and ID.
Student has the following members: name, gender, ID, class, numberInClass, and grade for subject.
Teacher has the following members: name, gender, ID, school, subjects, and salary.

Write a program that has a data structure containing both students and teachers.
Write a method that iterates through the data structure and prints information about the teachers and the students.
Write a method that returns the student with the highest grade for a subject.
Write a method that returns the student with the lowest grade for a subject.
Write a method that returns the average salary.
Write a method that will return the average grade of a student based on all grades for every subject.
Write a method that will return the average grade of the whole class based on the average grade from every Student.
Write a method that returns the name of the Subject of which a single student has the highest grade.
Write a method that returns the teacher that is signing the highest grades to the students.
Note: The grade for a given subject must belong to a student signed by a given teacher.