<u>Problem 2</u>. [Polymorphism] In the prob2 package of your workspace, you are given fully implemented classes Staff and Teacher.You will also find a class Statistics in the prob2 package, with an unimplemented method computeSumOfSalaries. Your task is to implement computeSumOfSalaries.

The main method of the Main class must first combine the two input lists of Staff and Teacher objects into a single list (using the combine method provided). You may find the interface EmployeeData useful for this purpose; this interface is provided in the prob2 package, but you will need to implement it yourself.

The combined list should be passed into computeSumOfSalaries, which must then *polymorphically* compute the sum of all the salaries of all Staff and Teacher objects in this combined list, by calling each object's getSalary() method; it must then return this computed value.

Requirements for this problem.

(1) You must compute the sum of all salaries using polymorphism. (For instance, if you obtain the sum of all salaries by first computing the sums of the salaries in each list separately, you will receive no credit.)

(2) Your implementation of computeSumOfSalaries may not check types (using instanceof or getClass()).

(3) You must use parametrized lists, not "raw" lists. (Example: This is a parametrized list: List<Duck> list. This is a "raw" list: List list.)

(4) You must add a proper List type in your implementations in the Main and Statistics classes.

(5) You must implement the combine method provided in the Main class for the purpose of combining the Staff and Teacher lists.

(6) You are allowed to modify declarations of Staff and Teacher (to support inheritance or interface implementation), but you *must not* remove the final keyword from either of these class declarations.

(7) There must not be any compilation errors or runtime errors in the solution that you submit.