1. Consider a class *Employee* with the private members: **experience** (int), **score** (double); and an abstract method **FindFindSalary**(double c) which computes the salary of the Employee.

   Now make a class **Officer** which is a child of class *Employee*. The class contains the method **FindFindSalary**(double c) that calculates the salary *s* as follows:

$$s = \text{experience} \times score^{c}$$

   Make another child class of *Employee* called Manager. In this class, define FindFindSalary(double c) that calculates the salary *s* as follows:

$$s = \left(\frac{\text{experience} \times score}{c}\right)^{c}$$

   Make the required set/get methods. Do not make any constructor. Now test the classes from main method through the following quires:

   - Find the average salary of an Officer and a Manager using the following data:

Employee type	experience	score	c
Officer 1	5	85	0.9
Manager 1	9	68	0.21

   [Hint: Make 2 objects of Employee and use each child class references to an Employee class object; then call the function - FindFindSalary(double c).]

2. Consider a class *Vehicle* with the private members: **Vehicle_ID** (int) and an abstract method **FindTotalPassengers**() which computes the total number of passengers transported.

   Now make a class **Car** which is a child of the class *Vehicle*. The class contains the method FindTotalPassengers() that returns 4. Make another child class of Vehicle called Bus. In this class, define FindTotalPassengers() and the function returns 50. Make another child class of Vehicle called Train. In this class, define a private integer variable: No_of_coaches. Define FindTotalPassengers() and the function returns the value considering a coach accommodating 100 passengers. Now test the classes from main method through the following quires:

   - Find the total number of passengers which can be transported using a car, a bus and a train containing 12 coaches. [Make 3 objects of Vehicle and use each child class references to an Vehicle class object; then call the functions FindTotalPassengers().]

3. Consider a class *Animal* with the private members: **age** (int) and **weight** (double); and an abstract method **ComputePrice**(double c) which computes the price of the Animal. Now make a class **Goat** which is a child of class *Animal*. The class contains the method **ComputePrice**(double c) that calculates the price *p* as follows:

$$p = \left(\frac{weight^2}{age}\right)^{c}$$

   Make another child class of *Animal* called **Sheep.** In this class, define **ComputePrice**(double c) that calculates the price *p* as follows:

$$p = \left(\frac{weight^2}{c \times age}\right)^{c}$$

   Make the required set/get methods. Do not make any constructor. Now test the classes from main method through the following quires:

   - Find the average price of a goat and a sheep using the following data:

Animal type	age	weight	c
Goat 1	2	15	0.59
Sheep 1	3	37	0.34

   [Hint: Make 2 objects of Animal and use each child class references to an Animal class object; then call the functions ComputePrice(double c).]