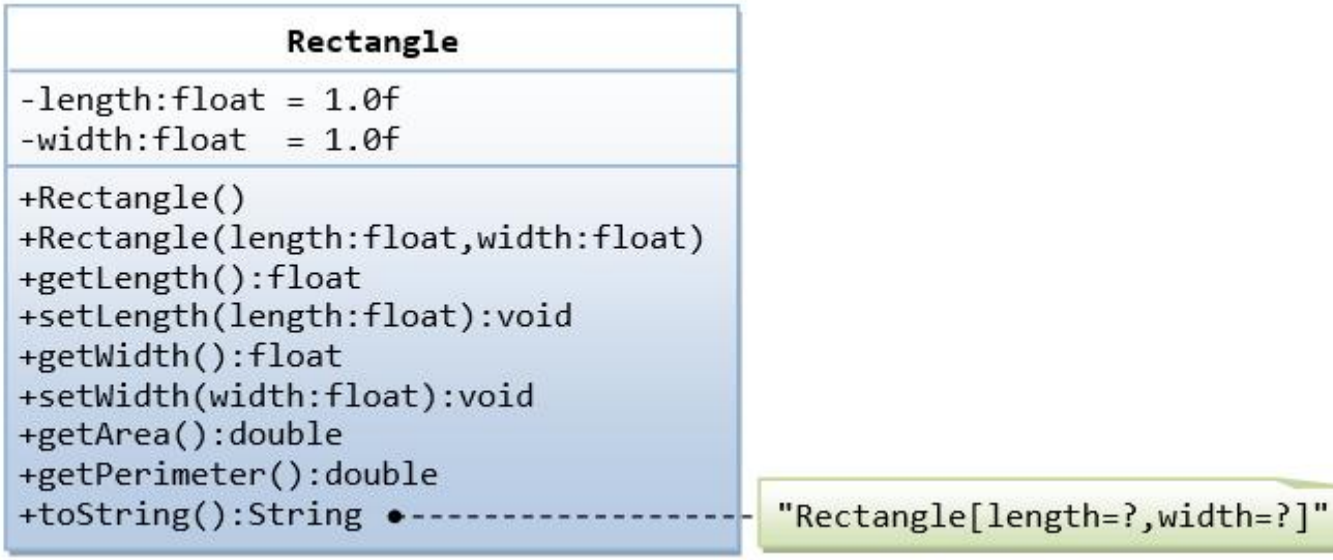
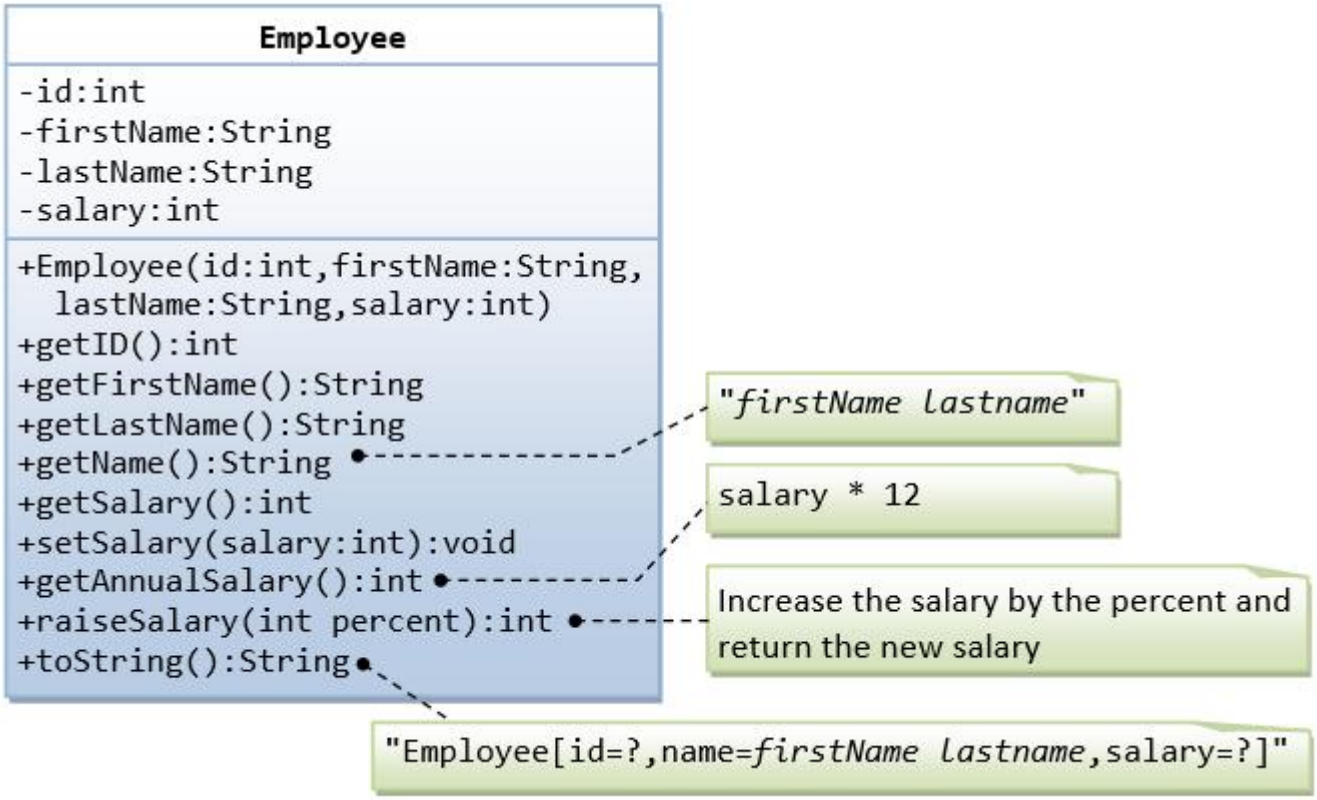
Assignment-6

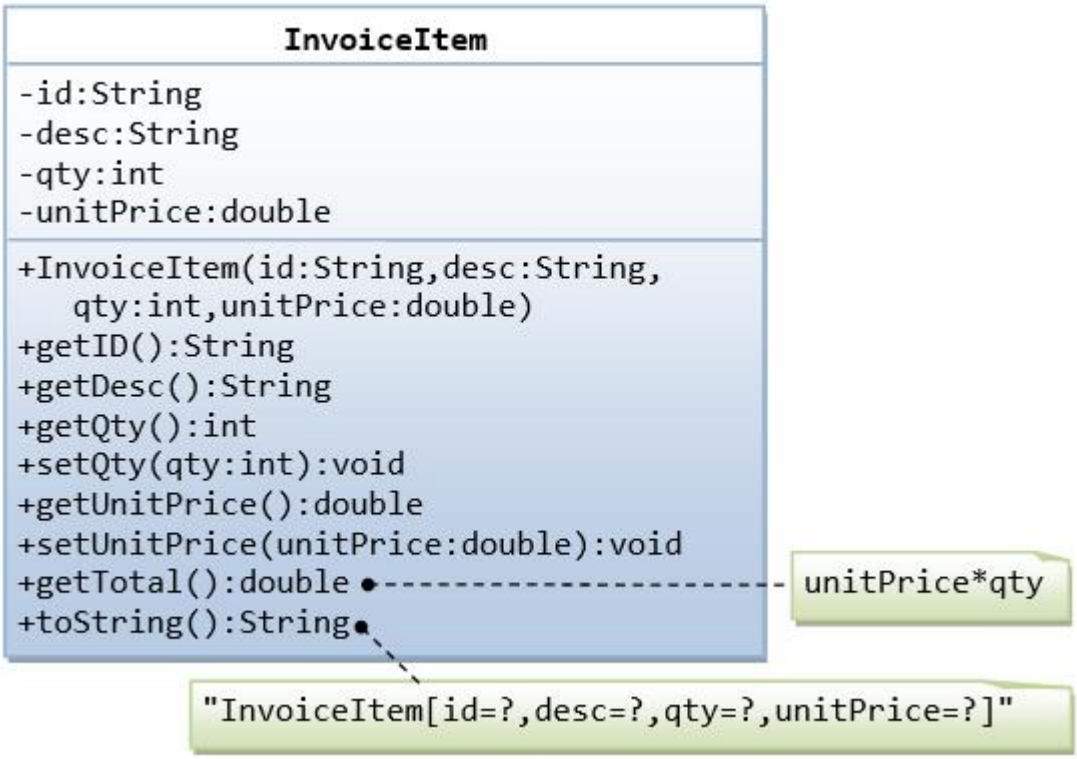
1.A class called Rectangle, which models a rectangle with a length and a width (in float), is designed as shown in the following class diagram. Write the Rectangle class.



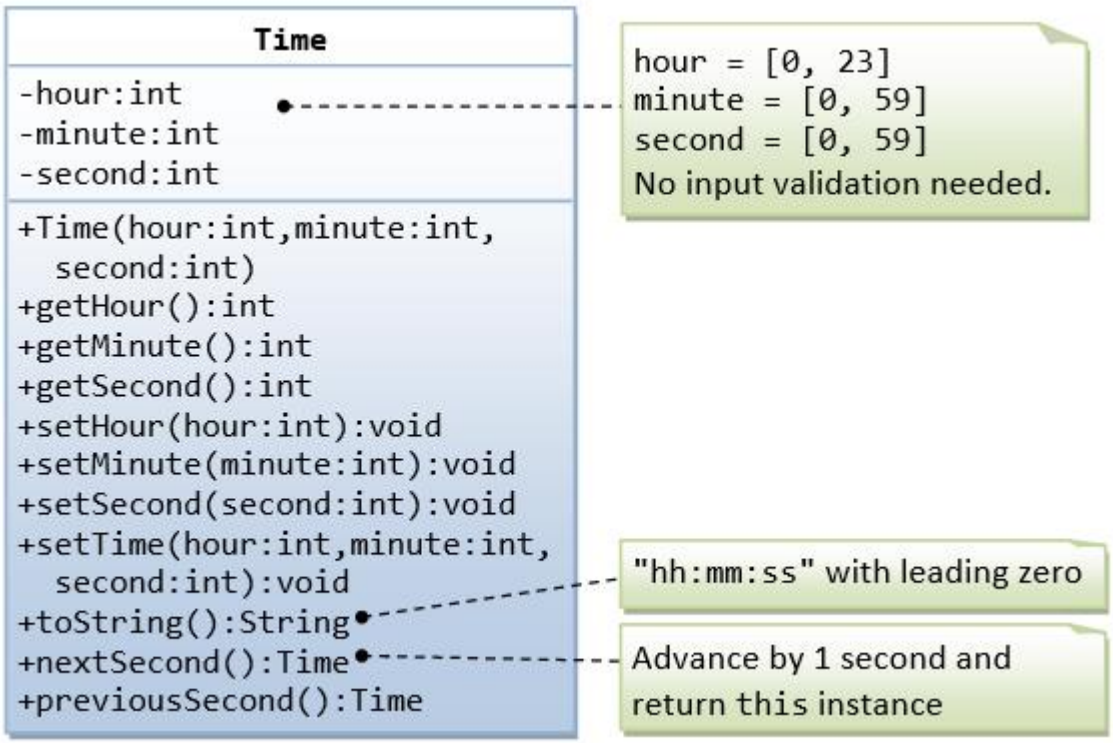
2.A class called Employee, which models an employee with an ID, name and salary, is designed as shown in the following class diagram. The method raiseSalary(percent) increases the salary by the given percentage. Write the Employee class.



3. A class called InvoiceItem, which models an item of an invoice, with ID, description, quantity and unit price, is designed as shown in the following class diagram. Write the InvoiceItem class.

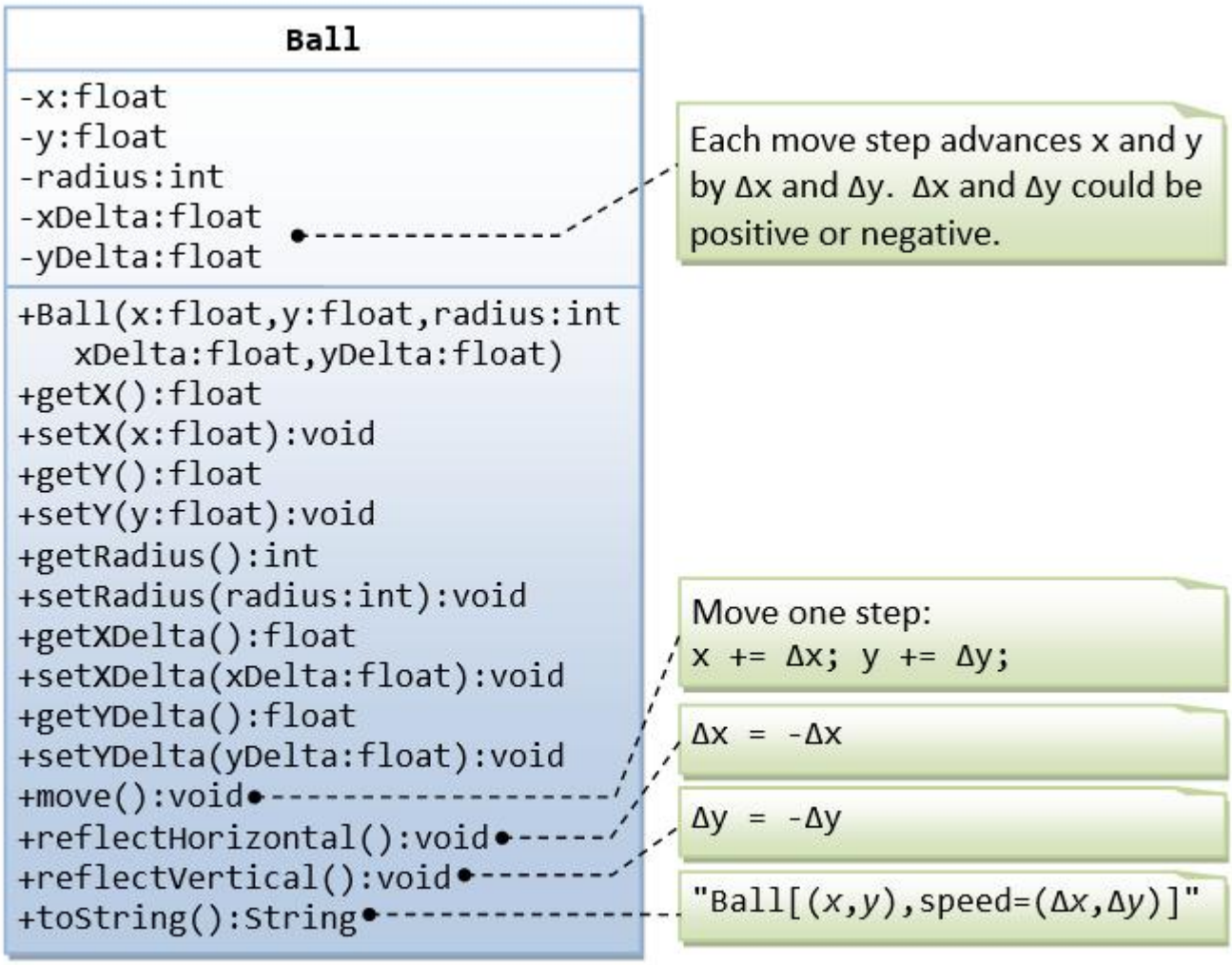


4.A class called Time, which models a time instance, is designed as shown in the following class diagram. The methods nextSecond() and previousSecond() shall advance or rewind this instance by one second, and return this instance, so as to support chaining operation such as t1.nextSecond().nextSecond(). Write the Time class.

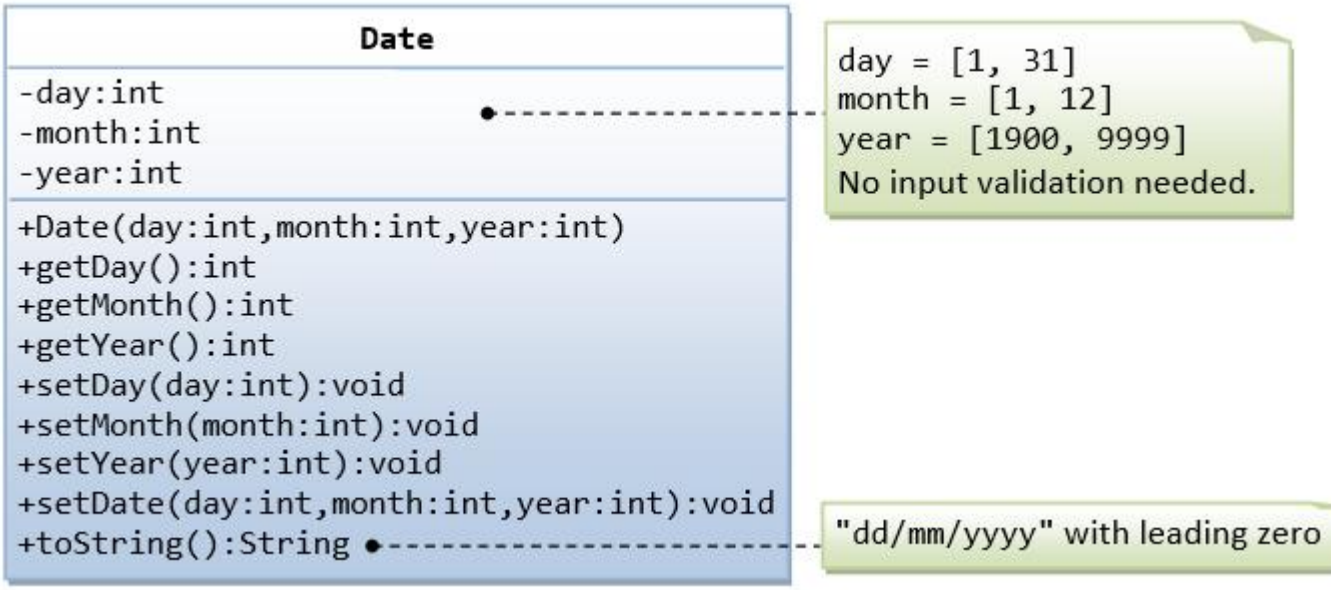


5.A class called Ball, which models a bouncing ball, is designed as shown in the following class diagram. It contains its radius, x and y position. Each move-step advances the x and y by delta-x and delta-y, respectively. delta-x and delta-y could be positive (or)negative.

The reflectHorizontal() and reflectVertical() methods could be used to bounce the ball off the walls. Write the Ball class. Study the test driver on how the ball bounces.



6.A class called Date, which models a calendar date, is designed as shown in the following class diagram. Write the Date class.



7. Write a program to demonstrate static variables, methods, and blocks.

8. Write a program to create a room class, the attributes of this class is roomno, roomtype, roomarea and ACmachine. In this class the member functions are setdata and displaydata.

9. write a program To find the sum of command line arguments and count the invalid integers entered.

10.Write a Java program to Print Right Triangle Number Pattern Type
34890
476
34
1