

OOPS LAB QUESTIONS ON 30/4/2026

1. Define a class called **Time** that has data fields: **seconds**, **minutes** and **hour** of type integer. **Time** should have **setSecond()**, **setMinute()**, **setHr()** and constructors (default), **disp()** that will print the details of **Time** instance.
Modify this **Time** class such that **IllegalArgumentException** is thrown if the **set** methods gets arguments less than zero and greater than 59.
When initialising second, minute, hour using set methods ensure that the argument passed is not less than zero and not greater than 59, throw **IllegalArgumentException** in the method.
Note : **IllegalArgumentException** is thrown in order to indicate that a method has been passed an illegal or inappropriate argument

2. Create a class called **Invoice** that a Grocery store might use to represent an invoice for an item sold at the store. An **Invoice** should include four pieces of information as instance variables—a part number (type integer), a part description (type String), quantity of the item being purchased (type integer) and a price per item (double). Provide methods constructor with four arguments. Write a test application to create an instance and validate the input. Ensure that part number is value greater than 0, part description is not null string, quantity of the item and price per item is value greater than 0.

Note : The **InputMismatchException** is thrown when attempting to retrieve a value that doesn't match the expected pattern or type.

Create an array of **Invoice** and throw **ArrayIndexOutOfBoundsException** when it accesses the array of **Invoice** to print the details.

3. Create a class **Account** that stores name, Acc.no and balance and includes the following member functions: **deposit()** ,**withdraw ()**-**throw an exception called “insufficient balance” if the balance is less than the minimum balance.**