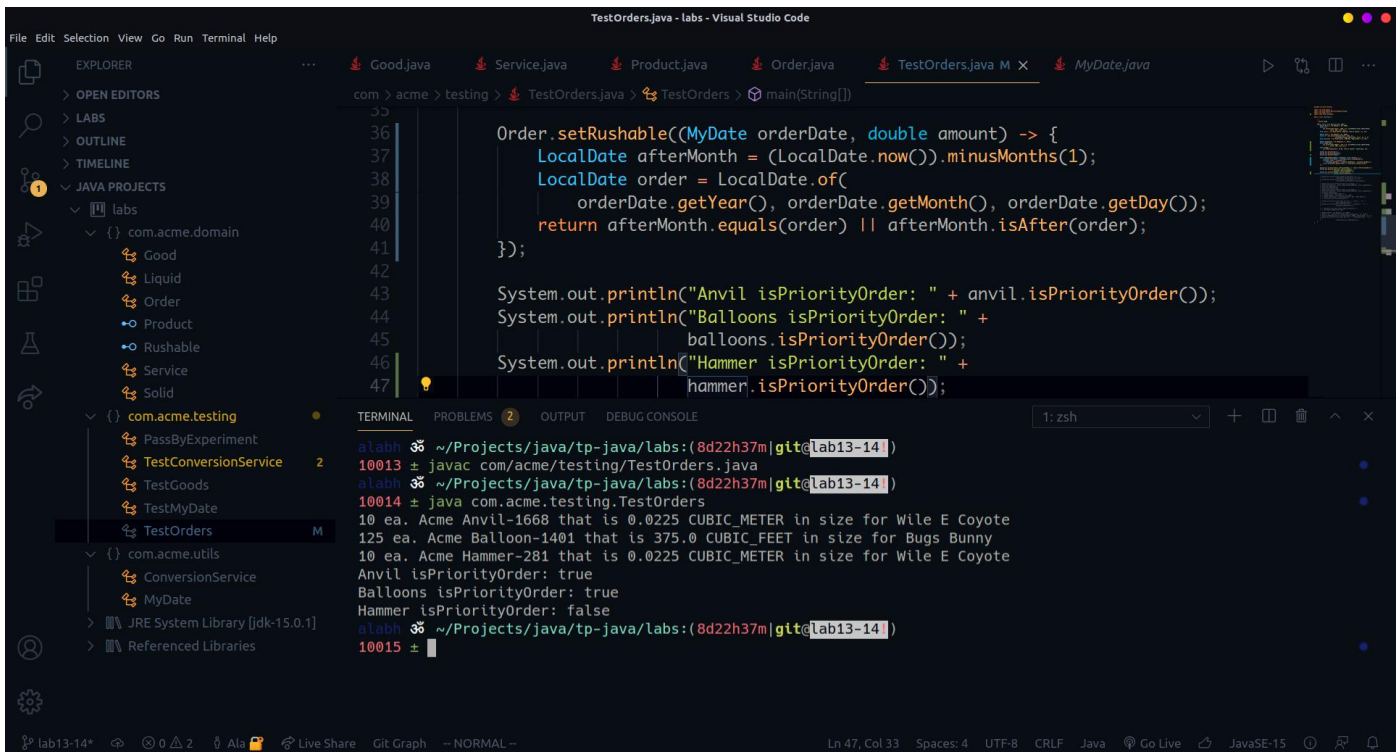


Compte Rendu labs 13-14 Java

by Ala Ben Hamouda GL2 Groupe 1

Lab 13:



The screenshot shows the Visual Studio Code editor with the file `TestOrders.java` open. The code defines a method `setRushable` that takes a `MyDate` object and a `double` amount, and returns a `boolean` indicating if the order is rushable. The code also prints the priority order for different items.

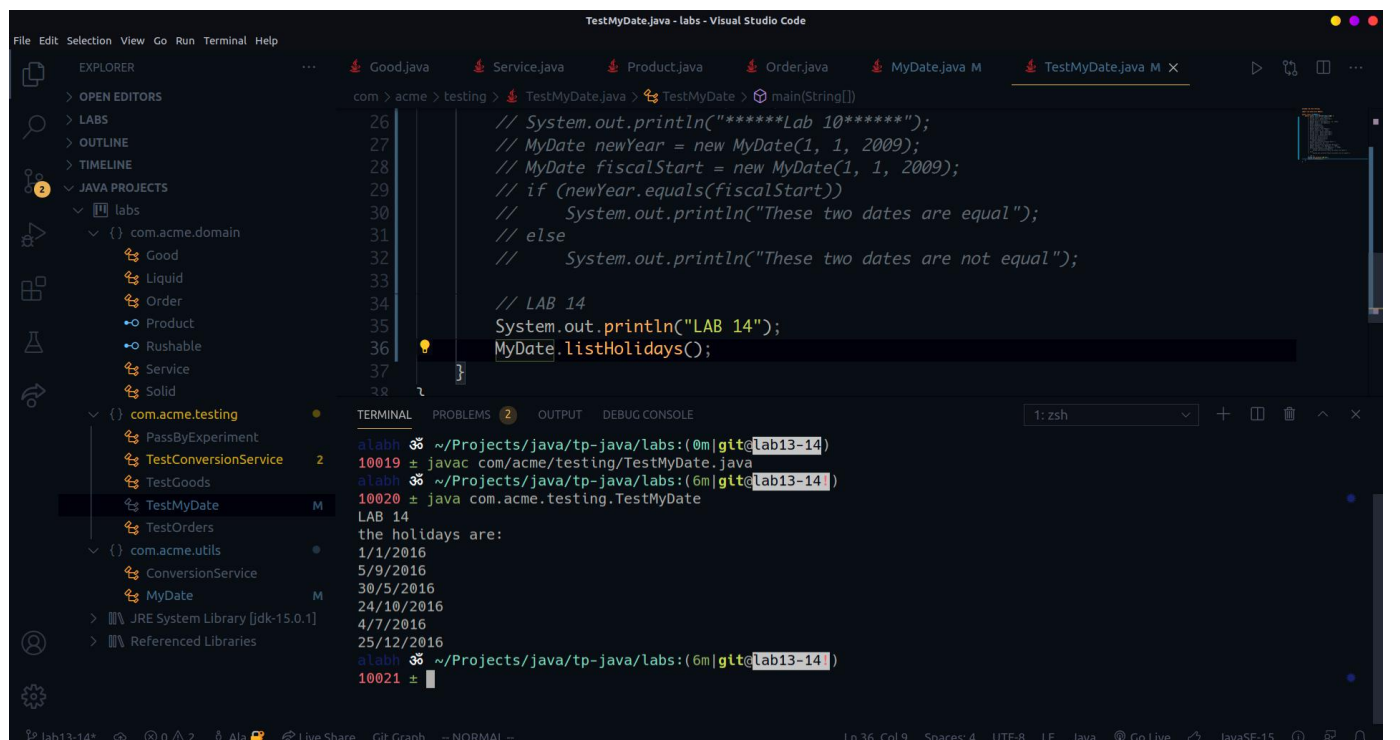
```
Order.setRushable((MyDate orderDate, double amount) -> {
    LocalDate afterMonth = (LocalDate.now()).minusMonths(1);
    LocalDate order = LocalDate.of(
        orderDate.getYear(), orderDate.getMonth(), orderDate.getDay());
    return afterMonth.equals(order) || afterMonth.isAfter(order);
});

System.out.println("Anvil isPriorityOrder: " + anvil.isPriorityOrder());
System.out.println("Balloons isPriorityOrder: " +
    balloons.isPriorityOrder());
System.out.println("Hammer isPriorityOrder: " +
    hammer.isPriorityOrder());
```

The terminal output shows the execution of the program:

```
alabh@ ~/Projects/java/tp-java/labs: (8d22h37m | git@lab13-14)
10013 ± javac com/acme/testing/TestOrders.java
alabh@ ~/Projects/java/tp-java/labs: (8d22h37m | git@lab13-14)
10014 ± java com.acme.testing.TestOrders
10 ea. Acme Anvil-1668 that is 0.0225 CUBIC_METER in size for Wile E Coyote
125 ea. Acme Balloon-1401 that is 375.0 CUBIC_FEET in size for Bugs Bunny
10 ea. Acme Hammer-281 that is 0.0225 CUBIC_METER in size for Wile E Coyote
Anvil isPriorityOrder: true
Balloons isPriorityOrder: true
Hammer isPriorityOrder: false
alabh@ ~/Projects/java/tp-java/labs: (8d22h37m | git@lab13-14)
10015 ±
```

Lab 14:



The screenshot shows the Visual Studio Code editor with the file `TestMyDate.java` open. The code defines a method `listHolidays` that prints the list of holidays for a given year.

```
// System.out.println("*****Lab 10*****");
// MyDate newYear = new MyDate(1, 1, 2009);
// MyDate fiscalStart = new MyDate(1, 1, 2009);
// if (newYear.equals(fiscalStart))
//     System.out.println("These two dates are equal");
// else
//     System.out.println("These two dates are not equal");

// LAB 14
System.out.println("LAB 14");
MyDate.listHolidays();
```

The terminal output shows the execution of the program:

```
alabh@ ~/Projects/java/tp-java/labs: (0m | git@lab13-14)
10019 ± javac com/acme/testing/TestMyDate.java
alabh@ ~/Projects/java/tp-java/labs: (6m | git@lab13-14)
10020 ± java com.acme.testing.TestMyDate
LAB 14
the holidays are:
1/1/2016
5/9/2016
30/5/2016
24/10/2016
4/7/2016
25/12/2016
alabh@ ~/Projects/java/tp-java/labs: (6m | git@lab13-14)
10021 ±
```

```
alabh@alabh:~/Projects/java/tp-java/labs (24m|git@Lab13-14|)
10013 ± java com.acme.testing.TestOrders
Order date, 1/1/2016, cannot be set to a holiday!
10 ea. Acme Anvil-1668 that is 0.0225 CUBIC_METER in size for Wile E Coyote
125 ea. Acme Balloon-1401 that is 375.0 CUBIC_FEET in size for Bugs Bunny
10 ea. Acme Hammer-281 that is 0.0225 CUBIC_METER in size for Wile E Coyote
Anvil isPriorityOrder: true
Exception in thread "main" java.lang.NullPointerException: Cannot invoke "com.acme.utils.MyDate.getYear()" because "<parameter1>" is null
    at com.acme.testing.TestOrders.lambda$main$0(TestOrders.java:39)
    at com.acme.domain.Order.isPriorityOrder(Order.java:25)
    at com.acme.testing.TestOrders.main(TestOrders.java:45)
alabh@alabh:~/Projects/java/tp-java/labs (25m|git@Lab13-14|)
10025 ±
```

```
alabh@alabh:~/Projects/java/tp-java/labs (35m|git@Lab13-14|)
10030 ± java com.acme.testing.TestConversionService
37.1954
0.58124
30000
40000
1763.7
13.94844
16.97542
-----
37.19540023803711
40000
40000.0
30000
4000
122000
52.84
1781.337
12.6804
15.432200000000002
-----
3.26172852E16
3.261728368641728E16
-----
1912276048
1234567890000
-----
LAB 14 BONUS
-----
14.0->30.864400000000003
29.0->63.033400000000006
6.5->14.3299
7.7->16.97542
2.0->4.4092
5.0->11.023
8.0->17.6368
4.0->8.8184
alabh@alabh:~/Projects/java/tp-java/labs (35m|git@Lab13-14|)
10031 ±
```

Even if we pass integers to allKgToPounds, it still works because it can implicitly cast integers to double without any issue.