

# Codes and Tests

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# Outline

- Code Structure
- Logging
- Test Results

# Code Structure

- The code works under exam package.
- The code is prepared with two classes, one class is called as “Sabun” and other one is called as “calculate”.
- In Sabun class, one constructor exists, and one method PrepareCargoPacket(int, int,int) exists.
- Calculate class includes the main method, and the method call to the static method in Sabun class.

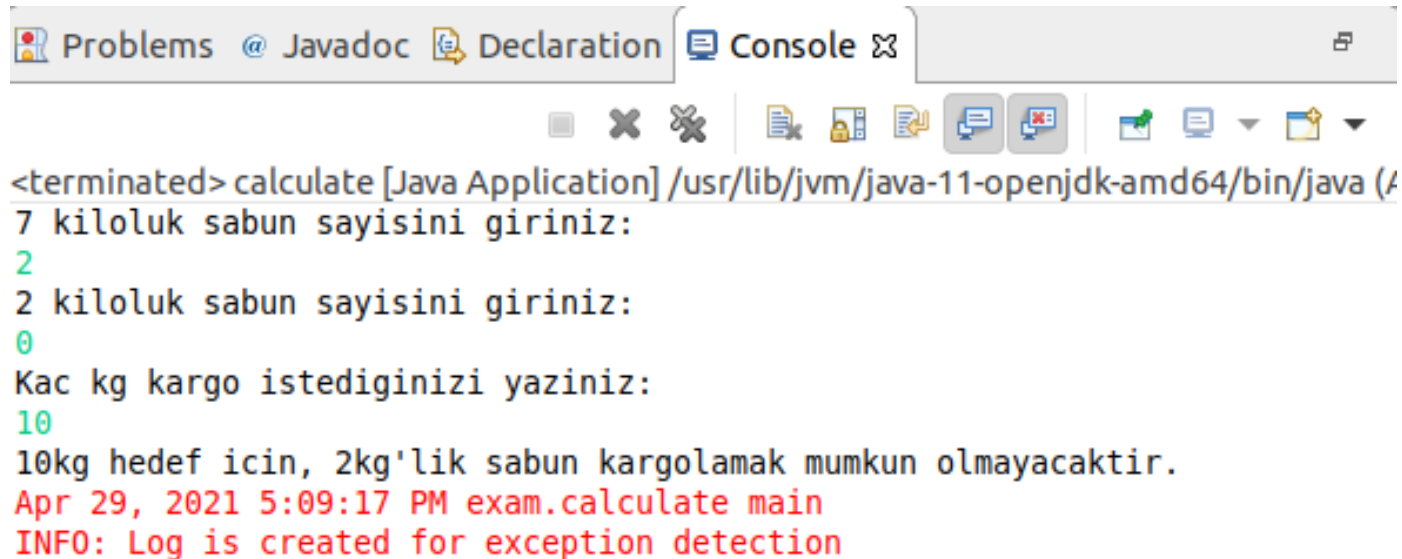
# Logging

- Due to information existing on internet \*, Springboot has “logging” functionality, with some libraries associated with it. However, as I did not create any application with Spring framework, I am not able to use this functionality.
- Instead, I used `java.util.logging.*` library and API for the logging.

# Logging

- For logging, my ideas are as follows:
- A file may be created in the program, writing each input and output into a log-file, therefore, there may be a file to be written and read frequently for logging.
- A database may be created, and results may be stored in this database, however, database should be secure and managed well.

# Test Results

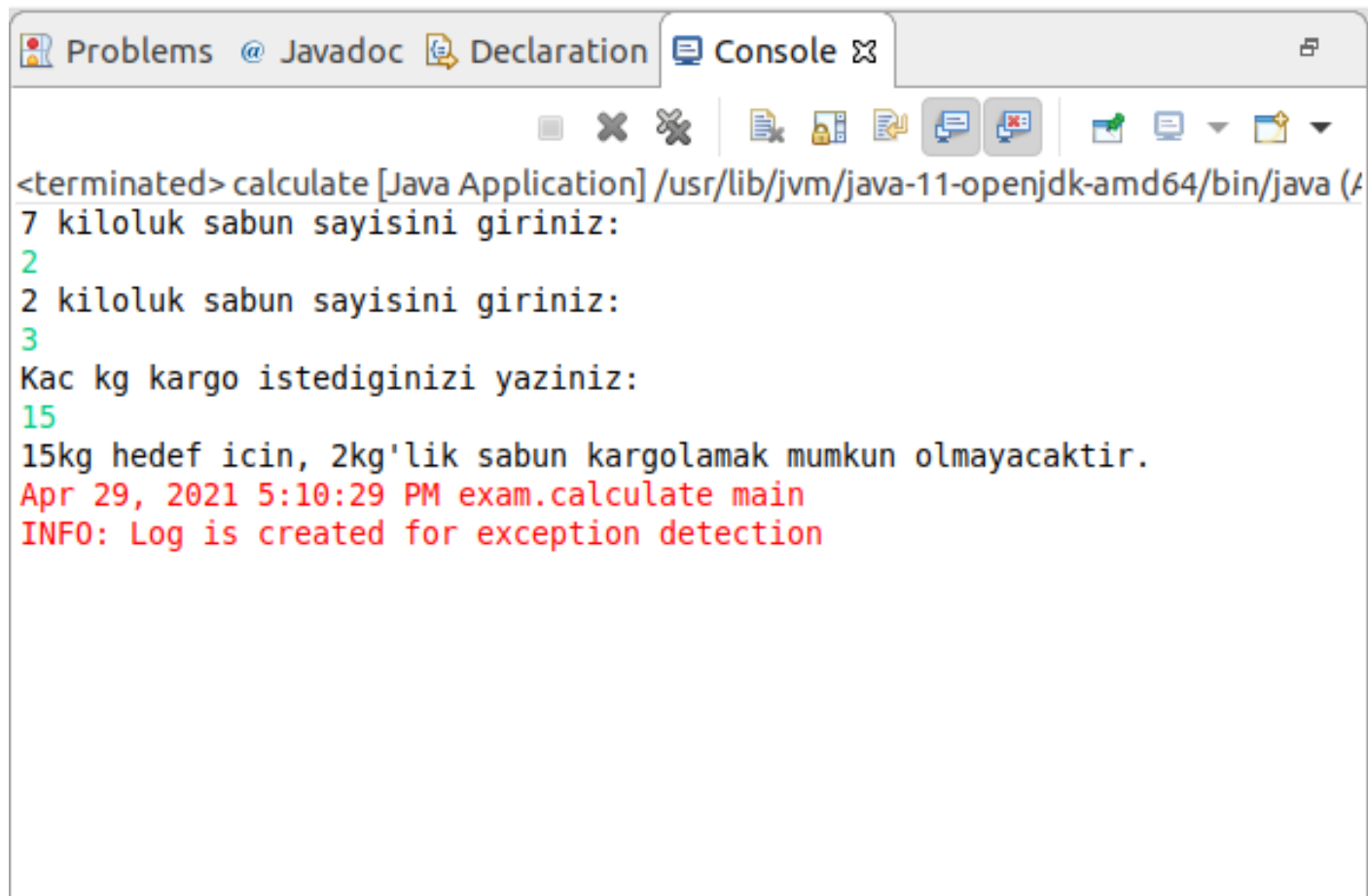


The screenshot shows an IDE console window with the following content:

```
<terminated> calculate [Java Application] /usr/lib/jvm/java-11-openjdk-amd64/bin/java (/
7 kiloluk sabun sayisini giriniz:
2
2 kiloluk sabun sayisini giriniz:
0
Kac kg kargo istediginizi yaziniz:
10
10kg hedef icin, 2kg'lik sabun kargolamak mumkun olmayacaktır.
Apr 29, 2021 5:09:17 PM exam.calculate main
INFO: Log is created for exception detection
```

The console window has a toolbar with icons for Problems, Javadoc, Declaration, Console, and other IDE functions. The text is displayed in a monospaced font, with some lines in red (error messages) and others in green (user input).

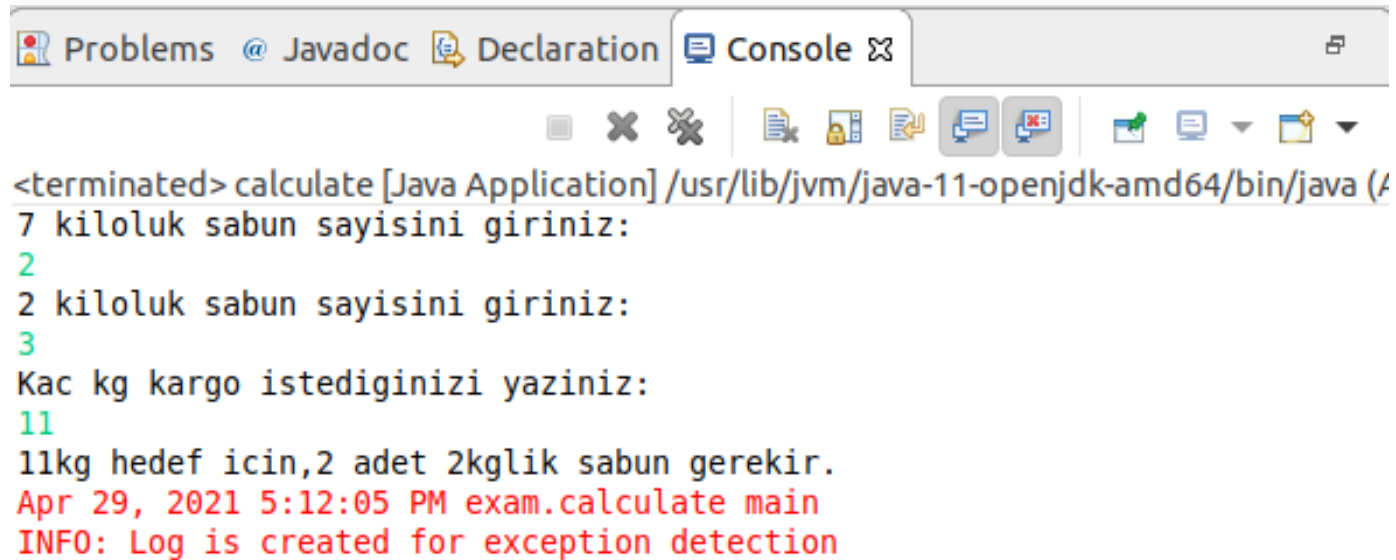
# Test Results.



The screenshot shows an IDE console window with the following content:

```
<terminated> calculate [Java Application] /usr/lib/jvm/java-11-openjdk-amd64/bin/java (/usr/lib/jvm/java-11-openjdk-amd64/bin/java)
7 kiloluk sabun sayisini giriniz:
2
2 kiloluk sabun sayisini giriniz:
3
Kac kg kargo istediginizi yaziniz:
15
15kg hedef icin, 2kg'lik sabun kargolamak mumkun olmayacaktır.
Apr 29, 2021 5:10:29 PM exam.calculate main
INFO: Log is created for exception detection
```

# Test Results



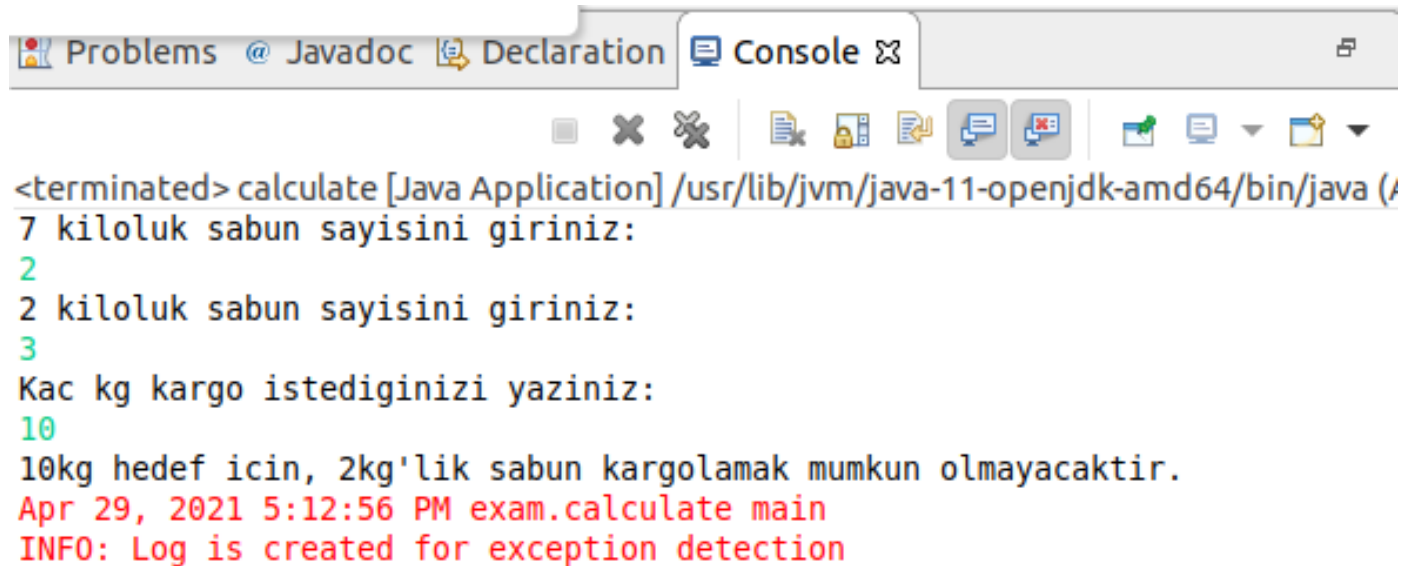
The screenshot shows an IDE console window with the following content:

```
<terminated> calculate [Java Application] /usr/lib/jvm/java-11-openjdk-amd64/bin/java (/
7 kiloluk sabun sayisini giriniz:
2
2 kiloluk sabun sayisini giriniz:
3
Kac kg kargo istediginizi yaziniz:
11
11kg hedef icin,2 adet 2kglik sabun gerekir.
Apr 29, 2021 5:12:05 PM exam.calculate main
INFO: Log is created for exception detection
```

The console window has a toolbar with icons for Problems, Javadoc, Declaration, Console, and a search icon. Below the toolbar are icons for running, debugging, and other IDE functions.



# Test Results



The screenshot shows an IDE console window with the following content:

```
<terminated> calculate [Java Application] /usr/lib/jvm/java-11-openjdk-amd64/bin/java (/
7 kiloluk sabun sayisini giriniz:
2
2 kiloluk sabun sayisini giriniz:
3
Kac kg kargo istediginizi yaziniz:
10
10kg hedef icin, 2kg'lik sabun kargolamak mumkun olmayacaktır.
Apr 29, 2021 5:12:56 PM exam.calculate main
INFO: Log is created for exception detection
```

The console window has tabs for Problems, Javadoc, Declaration, and Console. The Console tab is active, showing the output of the Java application. The output includes prompts for user input, the input values, and a final message about the target weight and a log message.

# References

- <https://docs.spring.io/spring-boot/docs/2.1.18.RELEASE/reference/html/boot-features-logging.html>
- <https://docs.oracle.com/javase/7/docs/api/java/util/logging/package-summary.html>