Obstacle #3 – Built-In Java Arrays

Write on the backside of this sheet, a Java **main program** in a class called, *DumpTruck*. The dump truck is carrying 1,000,000 six-sided dice. If the dump truck unexpectantly dumps all the dice on the road, display the frequency of each face appearing upright, as shown in Figure 2. The **Die class** is given in the starter kit and does not require any alterations.

REQUIRED
1) you must create a 1,000,000 element dice ARRAY and store a single Die object in each element.
2) format the output EXACTLY as shown in Figure 2, i.e. use System.out.printf ( )
3) you will find that you need 2 FOR Loops, make at least one them an **ENHANCED for loop**.

Figure 1. A dump truck spilling 1,000,000 dice on the road

```
Dice Roll Frequency
 1:  166,779
 2:  167,051
 3:  166,361
 4:  166,451
 5:  166,563
 6:  166,795
```

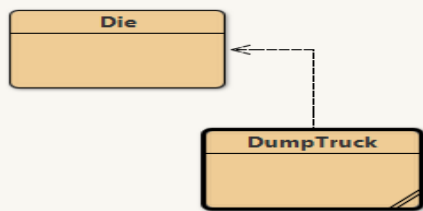Figure 2. The DumpTruck program's product shot.

Figure 4. Java Classes Layout

Recommended:

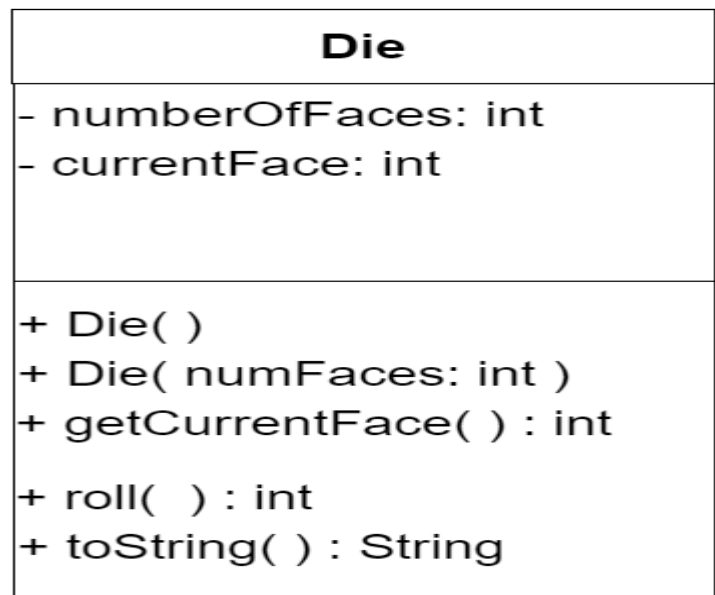Download the ZIP starter kit and check your answer with the computer.

Die

– numberOfFaces: int
– currentFace: int

+ Die( )
+ Die(numFaces: int)
+ getCurrentFace( ) : int

+ roll( ) : int
+ toString( ) : String

Figure 3. The Die UML

```java
public class DumpTruck
{
    public static void main(String[] args)
    {

        // create a 1,000,000 dice ARRAY and store in each element a single Die object.



    }
}
```