1. Design and implement a class called **MonetaryCoin** that is derived from the Coin class presented in Chapter 4. Store a value in the monetary coin that represents its value and add a method that returns its value. Create a main driver class to instantiate and compute the sum of several **MonetaryCoin** objects. Demonstrate that a monetary coin inherits its parent's ability to be flipped.

2. Design and implement a set of classes that define the employees of a hospital: doctor, nurse, administrator, surgeon, receptionist, janitor, and so on. Include methods in each class that are named according to the services provided by that person and that print an appropriate message. Create a main driver class to instantiate and exercise several of the classes.

3. Design and implement a set of classes that define various types of reading material: books, novels, magazines, technical journals, textbooks, and so on. Include data values that describe various attributes of the material, such as the number of pages and the names of the primary characters. Include methods that are named appropriately for each class and that print an appropriate message. Create a main driver class to instantiate and exercise several of the classes.

```java
import java.util.Random;
public class Coin
{
        private final int HEADS = 0;
        private final int TAILS = 1;
        private int face;

        //------------------------------------------------------------------
        // Sets up the coin by flipping it initially.
        //------------------------------------------------------------------
        public Coin ()
        {
                flip();
        }

        //------------------------------------------------------------------
        // Flips the coin by randomly choosing a face value.
        //------------------------------------------------------------------
        public void flip ()
        {
                face = (int) (Math.random() * 2);
        }

        public boolean isHeads ()
        {
                return (face == HEADS);
        }

        //------------------------------------------------------------------
        // Returns the current face of the coin as a string.
        //------------------------------------------------------------------
        public String toString()
        {
                String faceName;
                if (face == HEADS)
                        faceName = "Heads";
                else
                        faceName = "Tails";
                return faceName;
        }
}
```