

# La Clase NumbreDisplay

```
public class NumbreDisplay
{
    private int limit;
    private int value;

    public NumbreDisplay(int rollOverLimit)
    {
        limit=rollOverLimit;
        value=0;
    }

    public int getValue()
    {
        return value;
    }

    public String getDisplayValue()
    {
        if (value<10) {
            return "0"+ value;
        } else {
            return "1"+ value;
        }
    }

    public void setValue( int replacementValue)
    {
        if ((replacementValue >=0) && (replacementValue < limit)){
            value=replacementValue;
        }
    }

    public void increment()
    {
        value = (value+1) % limit;
    }
}
```

# La Clase ClockDisplay

```
public class ClockDisplay
{
    private NumbreDisplay hours;
    private NumbreDisplay minutes;
    private String displayString;

    public ClockDisplay()
    {
        hours= new NumbreDisplay(24);
        minutes = new NumbreDisplay(60);
        updateDisplay();
    }

    public ClockDisplay(int hour, int minute)
    {
        hours= new NumbreDisplay(24);
        minutes = new NumbreDisplay(60);
        setTime(hour, minute);
    }

    public void timeTick()
    {
        minutes.increment();
        if (minutes.getValue()==0) {
            hours.increment();
        }
        updateDisplay();
    }

    public void setTime(int hour, int minute)
    {
        hours.setValue(hour);
        minutes.setValue(minute);
        updateDisplay();
    }

    public String getTime()
    {
        return displayString;
    }

    private void updateDisplay()
    {
        displayString=hours.getDisplayValue()+" : "+ minutes.getDisplayValue();
    }
}
```