

# Lab07 Solution

```
public class TV {
    public int channel;
    public int volumeLevel;
    public boolean on;

    public void turnOn(){
        on = true;
    }
    public void turnOff(){
        on = false;
    }
    public boolean isOn(){
        return on;
    }

    public void volumeLevelUp(int vol){
        volumeLevel += vol;
        if (volumeLevel>=8)
            volumeLevel = 8;
    }
    public void volumeLevelDown(int vol){
        volumeLevel -= vol;
        if (volumeLevel<=0)
            volumeLevel = 0;
    }

    public void channelUp(int ch){
        channel += ch;
        if (channel>=100)
            channel = 100;
    }
    public void channelDown(int ch){
        channel -= ch;
        if (channel<=0)
            channel = 0;
    }

    public String toString(){
        String x = "";
        //String s = "";
        if (isOn()==true){
            String x1 = "on";
            x=x1;
        }
        else if (isOn() == false){
            String x1= "off";
            x=x1;
        }
    }
}
```

```
String s = "Tv is "+x+" and current channel is "+channel+" and current volume  
is level is "+volumeLevel;  
return s;  
}  
}
```

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```
public class TestTV {
```

```
    public static void main(String[] args) {  
        TV tv1 = new TV();  
        tv1.turnOn();  
        tv1.channelUp(20);  
        tv1.volumeLevelUp(4);  
        if (tv1.isOn() == true)  
            System.out.println(tv1.toString());  
        tv1.turnOff();  
    }  
}
```