

## Adapter Design Pattern :

```
class Volt {  
    private int volts;  
    public Volt(int v) {  
        this.volts = v;  
    }  
  
    public int getVolts() {  
        return volts;  
    }  
  
    public void setVolts(int volts) {  
        this.volts = volts;  
    }  
}
```

```
class Socket {  
    public Volt getVolt() {  
        return new Volt(120);  
    }  
}
```

```
interface SocketAdapter {  
    Volt get120Volt();  
  
    Volt get12Volt();  
  
    Volt get3Volt();  
}
```

```
class SocketClassAdapter extends Socket implements SocketAdapter {
```

```
    public Volt get120Volt() {  
        return getVolt();  
    }  
}
```

```
    public Volt get12Volt() {  
        Volt v = getVolt();  
        return convertVolt(v, 10);  
    }  
}
```

```
    public Volt get3Volt() {  
        Volt v = getVolt();  
        return convertVolt(v, 40);  
    }  
}
```

```
    private Volt convertVolt(Volt v, int i) {  
        return new Volt(v.getVolts() / i);  
    }  
}
```

```
public class Main {  
    public static void main(String[] args) {  
        SocketAdapter socketAdapter = new SocketClassAdapter();  
  
        Volt v120 = socketAdapter.get120Volt();  
        Volt v12 = socketAdapter.get12Volt();  
        Volt v3 = socketAdapter.get3Volt();  
  
        System.out.println("The Output of 120V: " + v120.getVolts());  
        System.out.println("The Output of 12V: " + v12.getVolts());  
    }  
}
```

```
        System.out.println("The Output of 3V: " + v3.getVolts());  
    }  
}
```