

```
interface Operatable {
```

```
    void operate();
```

```
abstract class Appliance {
```

```
    String model;
```

```
    public Appliance (String model) {
```

```
        this.model = model;
```

```
    abstract void powerSource();
```

```
    public void showModel() {
```

```
        System.out.println ("Appliance Model: "+model);
```

```
    }
```

```
}
```

```
class WashingMachine extends Appliance implements
```

```
    Operatable {
    public WashingMachine (String model) {
        super (model);
```

```
    public void operate() {
```

```
        System.out.println ("Washing machine is  
        running a wash cycle.");
```

```
    void powerSource() {
```

```
        System.out.println ("Washing machine uses  
        electricity");
```

```
}
```

class SolarFan extends Appliance implements

```
Operatable {  
    public SolarFan(String model) {  
        super(model);  
    }  
    public void operate() {  
        System.out.println("Solar fan is spinning  
        with solar energy.");  
    }  
    void powerSource() {  
        System.out.println("Solar fan uses  
        solar power.");  
    }  
}
```

public class Abstraction {

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

```
        Appliance wm = new WashingMachine("LG-  
        TurboWash);
```

```
        wm.showModel();
```

```
        ((Operatable)wm).operate();
```

```
        wm.powerSource();
```

```
        System.out.println();
```

```
        Appliance sf = new SolarFan("SunWind-pro);
```

```
        sf.showModel();
```

```
        ((operatable)sf).operate();
```

```
        sf.powerSource();  
    }
```

}