

```
package com.sxt.composite;
```

```
import java.util.ArrayList;
```

```
import java.util.List;
```

```
//抽象构建
```

```
public interface AbstractFile {  
    void killVirus(); //杀毒  
}
```

```
class ImageFile implements AbstractFile{  
    private String name;  
  
    public ImageFile(String name) {  
        super();  
        this.name=name;  
    }  
  
    @Override  
    public void killVirus() {  
        System.err.println("--图片文件:"+name+", 进行查杀!");  
    };  
}
```

```
class TextFile implements AbstractFile{  
    private String name;  
  
    public TextFile(String name) {  
        super();  
        this.name=name;  
    }  
  
    @Override
```

```

        public void killVirus() {
            System.err.println("--文本文件:"+name+", 进行查杀!");
        };
    }
}

```

```

class VedioFile implements AbstractFile{
    private String name;

    public VedioFile(String name) {
        super();
        this.name=name;
    }

    @Override
    public void killVirus() {
        System.err.println("--图像文件:"+name+", 进行查杀!");
    };
}

```

```

class Folder implements AbstractFile{
    private String name;
    //定义容器，用来存放本容器构建下的子节点
    private List<AbstractFile> list;

    public Folder(String name) {
        this.name=name;
        list=new ArrayList<>();
    }

    public void add(AbstractFile file) {
        list.add(file);
    }
}

```

```
public void remove(AbstractFile file) {  
    list.remove(file);  
}
```

```
public AbstractFile getChild(int index) {  
    return list.get(index);  
}
```

//天然递归

```
@Override
```

```
public void killVirus() {  
    System.err.println("----文件夹:"+name+", 进行查杀!");  
    for(AbstractFile file:list) {  
        file.killVirus();  
    }  
}
```

```
}
```