

// Product Interface

```
interface Document {  
    void open();  
}
```

// Concrete Products

```
class WordDocument implements Document {  
    @Override  
    public void open() {  
        System.out.println("Opening Word document.");  
    }  
}
```

```
class PdfDocument implements Document {  
    @Override  
    public void open() {  
        System.out.println("Opening PDF document.");  
    }  
}
```

// Creator Abstract Class

```
abstract class DocumentCreator {  
    public abstract Document createDocument();  
  
    public void openDocument() {  
        Document doc = createDocument();
```

```
        doc.open();
    }
}
```

```
// Concrete Creators
```

```
class WordDocumentCreator extends DocumentCreator {

    @Override

    public Document createDocument() {

        return new WordDocument();

    }

}
```

```
class PdfDocumentCreator extends DocumentCreator {

    @Override

    public Document createDocument() {

        return new PdfDocument();

    }

}
```

```
// Client code
```

```
public class FactoryMethodPatternDemo {

    public static void main(String[] args) {

        DocumentCreator wordCreator = new WordDocumentCreator();

        DocumentCreator pdfCreator = new PdfDocumentCreator();

        wordCreator.openDocument(); // Output: Opening Word document.

        pdfCreator.openDocument(); // Output: Opening PDF document.

    }

}
```

