

# FactoryMethodPattern

J Document.java

```
1 public interface Document {  
2     void open();  
3 }  
4
```

J DocumentFactory.java > ...

```
1 public abstract class DocumentFactory {  
2     public abstract Document createDocument();  
3 }  
4
```

J ExcelDocument.java > ...

```
1 public class ExcelDocument implements Document {  
2     @Override  
3     public void open() {  
4         System.out.println(x:"Opening an Excel document.");  
5     }  
6 }  
7
```

J ExcelDocumentFactory.java > ...

```
1 public class ExcelDocumentFactory extends DocumentFactory {  
2     @Override  
3     public Document createDocument() {  
4         return new ExcelDocument();  
5     }  
6 }
```

J Main.java > ...

```
1 public class Main {  
2     Run | Debug  
3     public static void main(String[] args) {  
4         DocumentFactory wordFactory = new WordDocumentFactory();  
5         Document word = wordFactory.createDocument();  
6         word.open();  
7  
8         DocumentFactory pdfFactory = new PdfDocumentFactory();  
9         Document pdf = pdfFactory.createDocument();  
10        pdf.open();  
11  
12        DocumentFactory excelFactory = new ExcelDocumentFactory();  
13        Document excel = excelFactory.createDocument();  
14        excel.open();  
15    }  
16 }
```

```
J PdfDocument.java > ...
1  public class PdfDocument implements Document {
2      @Override
3      public void open() {
4          System.out.println(x:"Opening a PDF document.");
5      }
6  }
7
```

```
J PdfDocumentFactory.java > ...
1  public class PdfDocumentFactory extends DocumentFactory {
2      @Override
3      public Document createDocument() {
4          return new PdfDocument();
5      }
6  }
7
```

```
J WordDocument.java > ...
1  public class WordDocument implements Document {
2      @Override
3      public void open() {
4          System.out.println(x:"Opening a Word document.");
5      }
6  }
7
```

```
J WordDocumentFactory.java > ...
1  public class WordDocumentFactory extends DocumentFactory {
2      @Override
3      public Document createDocument() {
4          return new WordDocument();
5      }
6  }
7
```

OUTPUT

```
Opening a Word document.
Opening a PDF document.
Opening an Excel document.
```