

FactoryMethodPatternExample

```
DocumentFactory.cs > DocumentFactory
6 references
1 public abstract class DocumentFactory
2 {
3     6 references
4     public abstract IDocument CreateDocument();
}
```

```
ExcelDocument.cs > ...
1 using System;
2
3     1 reference
4     public class ExcelDocument : IDocument
5     {
6         4 references
7         public void Open()
8         {
9             Console.WriteLine("Opening an Excel document.");
10        }
11    }
```

```
ExcelDocumentFactory.cs > ExcelDocumentFactory
1 reference
1 public class ExcelDocumentFactory : DocumentFactory
2 {
3     4 references
4     public override IDocument CreateDocument()
5     {
6         return new ExcelDocument();
7     }
}
```

```
IDocument.cs > ...
10 references
1 public interface IDocument
2 {
3     6 references
4     void Open();
}
```

```

C# PdfDocument.cs > ...
1  using System;
2
    1 reference
3  public class PdfDocument : IDocument
4  {
    4 references
5      public void Open()
6      {
7          Console.WriteLine("Opening a PDF document.");
8      }
9  }

```

```

C# PdfDocumentFactory.cs > PdfDocumentFactory
    1 reference
1  public class PdfDocumentFactory : DocumentFactory
2  {
    4 references
3      public override IDocument CreateDocument()
4      {
5          return new PdfDocument();
6      }
7  }

```

```

C# Program.cs > Program > Main
1  using System;
2
    0 references
3  class Program
4  {
    0 references
5      static void Main(string[] args)
6      {
7          DocumentFactory wordFactory = new WordDocumentFactory();
8          IDocument wordDoc = wordFactory.CreateDocument();
9          wordDoc.Open();
10
11         DocumentFactory pdfFactory = new PdfDocumentFactory();
12         IDocument pdfDoc = pdfFactory.CreateDocument();
13         pdfDoc.Open();
14
15         DocumentFactory excelFactory = new ExcelDocumentFactory();
16         IDocument excelDoc = excelFactory.CreateDocument();
17         excelDoc.Open();
18     }
19 }

```

```

C# WordDocument.cs > ...
1  using System;
2
    1 reference
3  public class WordDocument : IDocument
4  {
    4 references
5      public void Open()
6      {
7          Console.WriteLine("Opening a Word document.");
8      }
9  }
10

```

```
WordDocumentFactory.cs > WordDocumentFactory
1 reference
1 public class WordDocumentFactory : DocumentFactory
2 {
3     4 references
4     public override IDocument CreateDocument()
5     {
6         return new WordDocument();
7     }
}
```

OUTPUT:

```
PS C:\Users\Lenovo\OneDrive\Desktop\C#\FactoryMethodPatternExample> dotnet run
Opening a Word document.
Opening a PDF document.
Opening an Excel document.
```