

# XML

books.xml

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<library>
```

```
<book>
```

```
<title>The Great Gatsby</title>
```

```
<author>F. Scott Fitzgerald</author>
```

```
<year>1925</year>
```

```
<genre>Fiction</genre>
```

```
</book>
```

```
<book>
```

```
<title>To Kill a Mockingbird</title>
```

```
<author>Harper Lee</author>
```

```
<year>1960</year>
```

```
<genre>Fiction</genre>
```

```
</book>
```

```
<book>
```

```
<title>1984</title>
```

```
<author>George Orwell</author>
```

```
<year>1949</year>
```

```
<genre>Dystopian</genre>
```

```
</book>
```

```
</library>
```

## XmlParser.java

```
package xml;

import org.w3c.dom.*;
import javax.xml.parsers.*;

public class XmlParser {

    public static void main(String[] args) {
        try {
            // Create a new DocumentBuilderFactory and DocumentBuilder
            DocumentBuilderFactory factory = DocumentBuilderFactory.newInstance();
            DocumentBuilder builder = factory.newDocumentBuilder();

            // Parse the XML file
            Document document = builder.parse("D:\\java exercises\\XML\\src\\xml\\books.xml");

            // Normalize the document
            document.getDocumentElement().normalize();

            // Get the root element (library)
            NodeList nodeList = document.getElementsByTagName("book");

            // Loop through each book in the XML document
            for (int i = 0; i < nodeList.getLength(); i++) {
                Node node = nodeList.item(i);

                if (node.getNodeType() == Node.ELEMENT_NODE) {
                    Element element = (Element) node;

                    // Get and print the details of each book
                    String title = element.getElementsByTagName("title").item(0).getTextContent();
```

```

String author = element.getElementsByTagName("author").item(0).getTextContent();
String year = element.getElementsByTagName("year").item(0).getTextContent();
String genre = element.getElementsByTagName("genre").item(0).getTextContent();

System.out.println("Title: " + title);
System.out.println("Author: " + author);
System.out.println("Year: " + year);
System.out.println("Genre: " + genre);
System.out.println("-----");
}
}

} catch (Exception e) {
e.printStackTrace();
}
}
}

```

## Output



```

run:
Title: The Great Gatsby
Author: F. Scott Fitzgerald
Year: 1925
Genre: Fiction
-----
Title: To Kill a Mockingbird
Author: Harper Lee
Year: 1960
Genre: Fiction
-----
Title: 1984
Author: George Orwell
Year: 1949
Genre: Dystopian
-----
BUILD SUCCESSFUL (total time: 0 seconds)

```