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## Library.xml File

Code :

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

<library>
  <categories id="cat-1">
    <name>
      Fiction
    </name>
    <books>
      <book id="b-001">
        <title>1984</title>
        <bookAuthor id="A101">George Orwell</bookAuthor>
        <publication year="1949"/>
        <price currency="USD">9.99</price>
      </book>
      <book id="b-002">
        <title>To Kill a Mockingbird</title>
        <bookAuthor id="A102">Harper Lee</bookAuthor>
        <publication year="1960"/>
        <price currency="USD">7.99</price>
      </book>
    </books>
  </categories>
  <categories id="cat-2">
    <name>
      Science
    </name>
    <books>
      <book id="b-003">
        <title>A Brief History of Time</title>
        <bookAuthor id="A103">Stephen Hawking</bookAuthor>
```

```
<publication year="1988"/>
<price currency="USD">15.00</price>
</book>
</books>
</categories>
<authors>
  <author id="A101">
    <authorName>George Orwell</authorName>
    <nationality>British</nationality>
  </author>
  <author id="A102">
    <authorName>Harper Lee</authorName>
    <nationality>American</nationality>
  </author>
  <author id="A103">
    <authorName>Stephen Hawking</authorName>
    <nationality>British</nationality>
  </author>
</authors>
</library>
```

## Library.xsd File

**Code :**

[illegible]

```

        <xs:complexType>
            <xs:simpleContent>
                <xs:extension
                    base="xs:string">
                        <xs:attribute
                            name="id" type="xs:string"
                            use="required"/>
                    </xs:extension>
                </xs:simpleContent>
            </xs:complexType>
        </xs:element>
        <xs:element name="publication">
            <xs:complexType>
                <xs:attribute name="year"
                    type="xs:int" use="required"/>
            </xs:complexType>
        </xs:element>
        <xs:element name="price">
            <xs:complexType>
                <xs:simpleContent>
                    <xs:extension
                        base="xs:decimal">
                            <xs:attribute
                                name="currency" type="xs:string"
                                use="required"/>
                        </xs:extension>
                    </xs:simpleContent>
                </xs:complexType>
            </xs:element>
        </xs:sequence>
        <xs:attribute name="id"
            type="xs:string" use="required"/>
    </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
<xs:attribute name="id" type="xs:string" use="required"/>
</xs:complexType>
</xs:element>

<!-- Define the "authors" element -->
<xs:element name="authors">
    <xs:complexType>
        <xs:sequence>
            <xs:element name="author" maxOccurs="unbounded">
                <xs:complexType>
                    <xs:sequence>
                        <xs:element name="authorName"
                            type="xs:string"/>
                        <xs:element name="nationality"
                            type="xs:string"/>
                    </xs:sequence>
                </xs:complexType>
            </xs:element>
        </xs:sequence>
    </xs:complexType>
</xs:element>

```

```
        </xs:sequence>
        <xs:attribute name="id" type="xs:string"
use="required" />
    </xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:sequence>
</xs:complexType>
</xs:element>
</xs:schema>
```

## Validation Output :

Document Valid