

**Write an XML file which will display the Book information which includes the following:**

**1) Title of the book 2) Author Name 3) ISBN number**

**4) Publisher name 5) Edition 6) Price**

**a) Write a Document Type Definition (DTD) to validate the above XML file.**

**b) Write a XML Schema Definition (XSD) to validate the above XML file.**

**a)Write a Document Type Definition (DTD) to validate the above XML file**

**Xml file:**

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

```
<?xml-stylesheet type="text/css" href="library.css" ?>
```

```
<?DOCTYPE catalogue SYSTEM "book.dtd"?>
```

```
<catalogue>
```

```
<book>
```

```
<title>c</title>
```

```
<author>Balaguruswamy</author>
```

```
<isbn>1234</isbn>
```

```
<publisher>pearson</publisher>
```

```
<edition>4</edition>
```

```
<price>$50</price>
```

```
</book>
```

```
<book>
```

```
<title>c++</title>
```

```
<author>Balaguruswamy</author>
```

```
<isbn>123</isbn>
```

```
<publisher>pearson</publisher>
```

```
<edition>3</edition>
```

```
<price>$55</price>
```

```
</book>
```

```
<book>
```

```
<title>java</title>
```

```
<author>Brett spell</author>
```

```
<isbn>12</isbn>
```

```
<publisher>Apress</publisher>
```

```
<edition>2</edition>
```

```
<price>$45</price>
```

```
</book>
```

```
</catalogue>
```

**Dtd File:**

```
<!ELEMENT catalogue (book)*>
```

```
<!ELEMENT book (title,author,isbn,publisher,edition,price)>
```

```
<!ELEMENT title (#PCDATA)>
```

```
<!ELEMENT author (#PCDATA)>
```

```
<!ELEMENT isbn (#PCDATA)>
```

```
<!ELEMENT publisher (#PCDATA)>
```

```
<!ELEMENT edition (#PCDATA)>
```

```
<!ELEMENT price (#PCDATA)>
```

**Library.css**

```
catalogue
```

```
{
```

```
font-family:arial;
```

```
color:blue;
```

```
font-size:16pt
```

```
}
```

```
book
```

```
{
```

```
font-family:times new roman;
```

```
color:blue;
```

```
table-layout:auto;
```

```
font-size:14pt
```

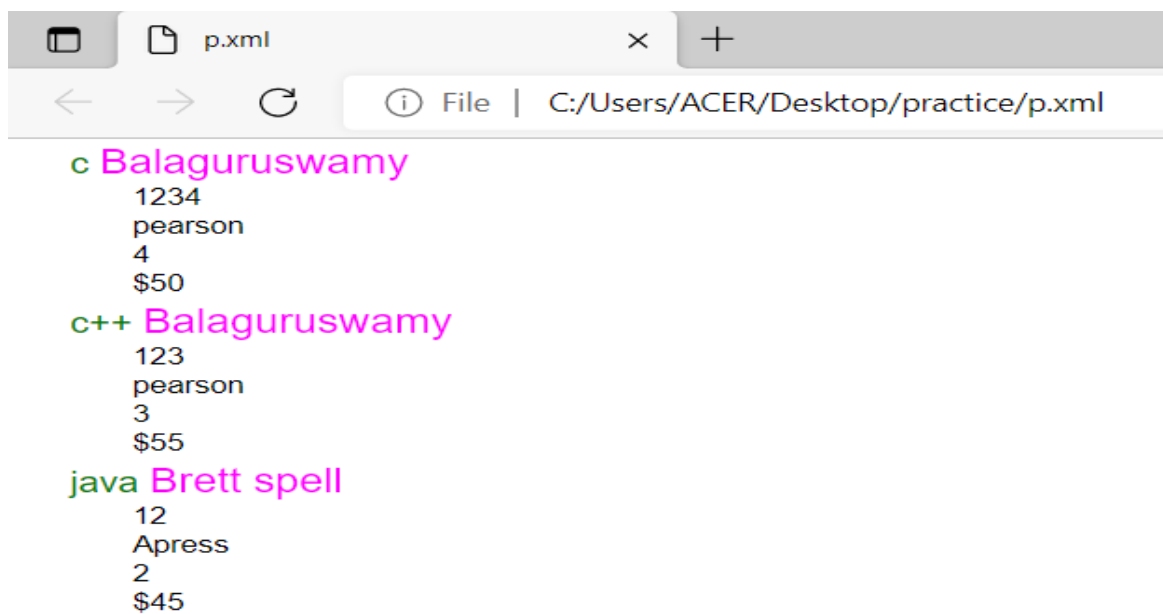
```
}
```

```
title
```

```
{
```

```
font-family:arial;
```

```
color:green;
margin-left:20pt;
font-size:12pt
}
author
{
font-family:arial;
color:magenta
}
publisher,edition,isbn,price
{
display:block;
font-family:arial;
color:black;
font-size:10pt;
margin-left:40pt
}
```



**b) Write a XML Schema Definition (XSD) to validate the above XML file.****Xml file:**

```
<?xml version="1.0" encoding="UTF-8"?>
<?xml-stylesheet type="text/css" href="library.css" ?>
<book xmlns:xsi="book.xsd">
<catalogue>
<book>
<title>c</title>
<author>Balaguruswamy</author>
<isbn>1234</isbn>
<publisher>pearson</publisher>
<edition>4</edition>
<price>$50</price>
</book>
<book>
<title>c++</title>
<author>Balaguruswamy</author>
<isbn>123</isbn>
<publisher>pearson</publisher>
<edition>3</edition>
<price>$55</price>
</book>
<book>
<title>java</title>
<author>Brett spell</author>
<isbn>12</isbn>
<publisher>Apress</publisher>
<edition>2</edition>
<price>$45</price>
</book>
</catalogue>
```

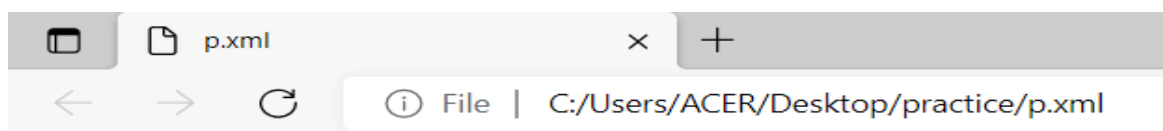
**book.xsd file**

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="">
<xs:element name="book">
<xs:complexType>
<xs:all>
<xs:element name="title" type="xs:string"/>
<xs:element name="author" type="xs:string"/>
<xs:element name="isbn" type="xs:integer"/>
<xs:element name="publisher" type="xs:string"/>
<xs:element name="edition" type="xs:decimal"/>
<xs:element name="price" type="xs:float"/>
</xs:all>
</xs:complexType>
</xs:element>
</xs:schema>
```

**Library.css**

```
catalogue
{
font-family:arial;
color:blue;
font-size:16pt
}
book
{
font-family:times new roman;
color:blue;
table-layout:auto;
font-size:14pt
}
title
```

```
{
font-family:arial;
color:green;
margin-left:20pt;
font-size:12pt
}
author
{
font-family:arial;
color:magenta
}
publisher,edition,isbn,price
{
display:block;
font-family:arial;
color:black;
font-size:10pt;
margin-left:40pt
}
```



```
c Balaguruswamy
  1234
  pearson
  4
  $50
c++ Balaguruswamy
  123
  pearson
  3
  $55
java Brett spell
  12
  Apress
  2
  $45
```