

Q01.

```
<?xml version="1.0" encoding="UTF-8"?>
<students>
  <student id="1" regNo="SEU/IS/20/ICT/084">
    <name>Pasan Kalhara</name>
    <department>ICT</department>
    <gpa>3.8</gpa>
  </student>
  <student id="2" regNo="SEU/IS/20/BST/006">
    <name>Tharushi Randhula</name>
    <department>BST</department>
    <gpa>4.0</gpa>
  </student>
  <student id="3" regNo="SEU/IS/20/ICT/026">
    <name>Ishara Madhushanka</name>
    <department>ICT</department>
    <gpa>3.9</gpa>
  </student>
  <student id="4" regNo="SEU/IS/20/ICT/045">
    <name>Sagara</name>
    <department>ICT</department>
    <gpa>2.0</gpa>
  </student>
  <student id="5" regNo="SEU/IS/20/BST/026">
    <name>Amani</name>
    <department>BST</department>
    <gpa>3.0</gpa>
  </student>
</students>
```

Q02.

```
<?xml version="1.0" encoding="UTF-8"?>
<library>
  <book id="1" isbn="S001" category="ICT">
    <title>C++</title>
    <author>Saman Ekanayaka</author>
    <price>1000.00</price>
  </book>
  <book id="2" isbn="S003" category="Engineering">
    <title>Moter Macanic</title>
    <author>Kavidhu Rathnayaka</author>
    <price>12000.00</price>
  </book>
```

```

<book id="3" isbn="S015" category="BST">
  <title>BST</title>
  <author>Sagara</author>
  <price>1000.00</price>
</book>
<book id="4" isbn="S033" category="English">
  <title>Romiyo Juliat</title>
  <author>Rathnayaka</author>
  <price>3000.00</price>
</book>
<book id="5" isbn="S063" category="Net Working">
  <title>Net Working</title>
  <author>Kavidhu Rathnayaka</author>
  <price>1000.00</price>
</book>
</library>

```

Q03.

```

<?xml version="1.0" encoding="UTF-8"?>
<timeTable>
  <Period id="1" day="Mon Day">
    <subject>OOD</subject>
    <time>8.00</time>
    <lecturerName>Kalhara</lecturerName>
  </Period>
  <Period id="2" day="Tue Day">
    <subject>NetWorke</subject>
    <time>10.35</time>
    <lecturerName>Damith</lecturerName>
  </Period>
  <Period id="3" day="Wens Day">
    <subject>Progrming</subject>
    <time>9.00</time>
    <lecturerName>Kasun</lecturerName>
  </Period>
  <Period id="4" day="The Day">
    <subject>Java Web Development</subject>
    <time>2.00</time>
    <lecturerName>Samitha</lecturerName>
  </Period>
  <Period id="5" day="Fri Day">
    <subject>OOAD</subject>
    <time>8.00</time>
    <lecturerName>Ishara</lecturerName>
  </Period>
</timeTable>

```

```

</Period>
<period id="6" day="sun Day">
  <subject>C++ Progrmin</subject>
  <time>3.00</time>
  <lecturerName>Kalhara</lecturerName>
</period>
</timeTable>

```

Q04.

index.html

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Q04</title>
</head>
<body>

  <p>Book Title List</p>
  <ul id="list"></ul>

  <script>
    const list = document.getElementById("list");
    const parser = new DOMParser();

    fetch('library.xml')
      .then(response => response.text())
      .then(xmlText => {
        const xmlDoc = parser.parseFromString(xmlText, 'text/xml');
        const library = xmlDoc.getElementsByTagName('book');

        for (let i = 0; i < library.length; i++) {
          const lib = library[i];
          const title =
lib.getElementsByTagName('title')[0]?.textContent.trim() || '';

          const row = document.createElement('li');
          row.innerHTML = `
            <li>${title}</li>
          `;

```

```

        list.appendChild(row);

        console.log(title);
    }
})
.catch(err => {
    console.error('Failed to load or parse library.xml:', err);
    const row = document.createElement('tr');
    row.innerHTML = `<li colspan="7">Failed to load library
data.</li>`;
    list.appendChild(row);
});
</script>

</body>
</html>

```

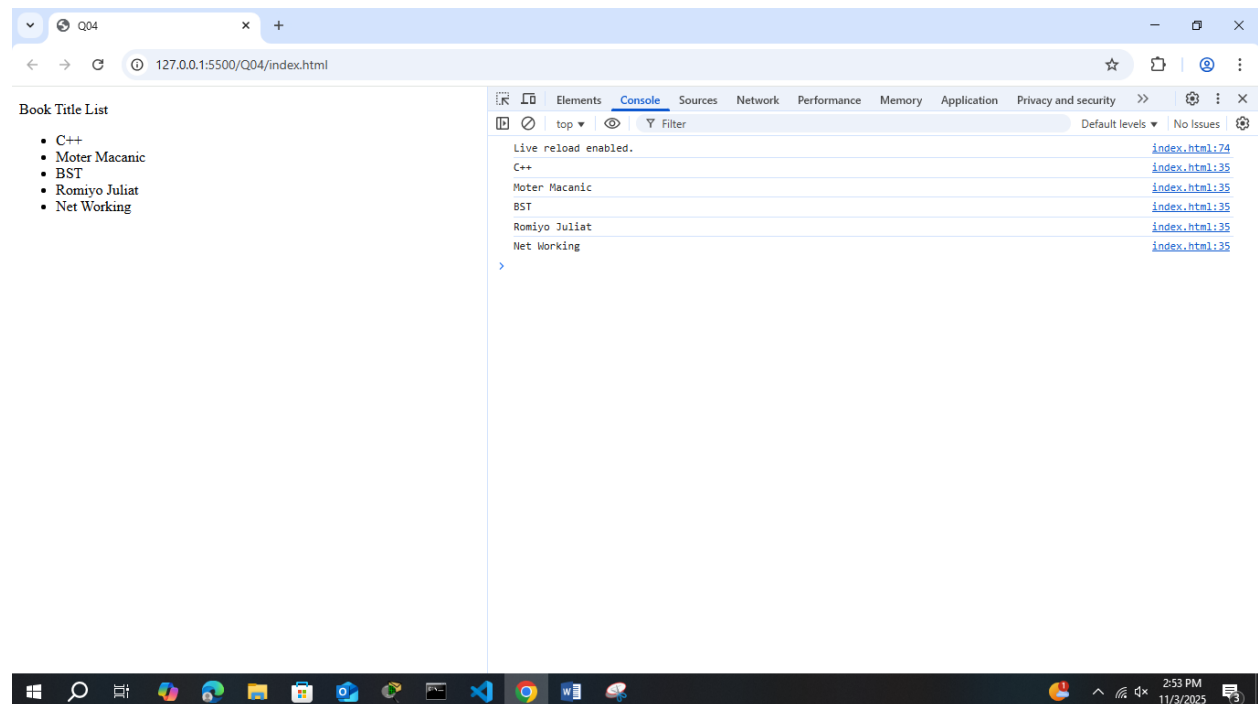
library.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<library>
    <book id="1" isbn="S001" category="ICT">
        <title>C++</title>
        <author>Saman Ekanayaka</author>
        <price>1000.00</price>
    </book>
    <book id="2" isbn="S003" category="Engineering">
        <title>Moter Macanic</title>
        <author>Kavidhu Rathnayaka</author>
        <price>12000.00</price>
    </book>
    <book id="3" isbn="S015" category="BST">
        <title>BST</title>
        <author>Sagara</author>
        <price>1000.00</price>
    </book>
    <book id="4" isbn="S033" category="English">
        <title>Romiyo Juliat</title>
        <author>Rathnayaka</author>
        <price>3000.00</price>
    </book>
    <book id="5" isbn="S063" category="Net Working">
        <title>Net Working</title>
        <author>Kavidhu Rathnayaka</author>
        <price>1000.00</price>
    </book>

```

```
</book>
</library>
```



Q05.

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Q05</title>
</head>
<body>

  <p>Students List</p>
  <table id="list" border="1">
    <tr>
      <th>Name</th>
      <th>GPA</th>
    </tr>
  </table>

  <script>
    const list = document.getElementById("list");
```

```

const parser = new DOMParser();

fetch('students.xml')
  .then(response => response.text())
  .then(xmlText => {
    const xmlDoc = parser.parseFromString(xmlText, 'text/xml');
    const students = xmlDoc.getElementsByTagName('student');

    for (let i = 0; i < students.length; i++) {
      const std = students[i];

      const gpa
=std.getElementsByTagName('gpa')[0]?.textContent.trim() || '';

      if(gpa >=3.5){
        const name =
std.getElementsByTagName('name')[0]?.textContent.trim() || '';
        const row = document.createElement('tr');
        row.innerHTML = `
          <td>${name}</td>
          <td>${gpa}</td>
        `;
        list.appendChild(row);

        console.log(name);
      }
    }
  })
  .catch(err => {
    console.error('Failed to load or parse students.xml:', err);
    const row = document.createElement('tr');
    row.innerHTML = `<td colspan="7">Failed to load students
data.</td>`;
    list.appendChild(row);
  });
</script>

</body>
</html>

```

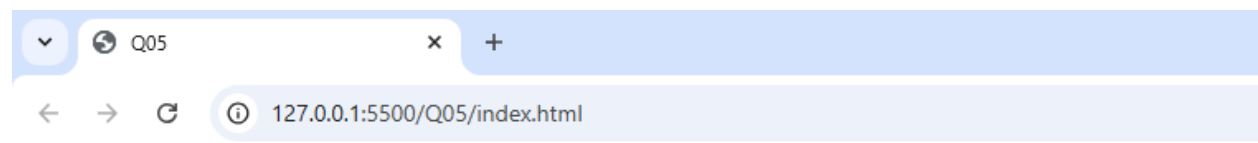
students.xml

```

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

```

```
<student id="1" regNo="SEU/IS/20/ICT/084">
  <name>Pasan Kalhara</name>
  <department>ICT</department>
  <gpa>3.8</gpa>
</student>
<student id="2" regNo="SEU/IS/20/BST/006">
  <name>Tharushi Randhula</name>
  <department>BST</department>
  <gpa>4.0</gpa>
</student>
<student id="3" regNo="SEU/IS/20/ICT/026">
  <name>Ishara Madhushanka</name>
  <department>ICT</department>
  <gpa>3.9</gpa>
</student>
<student id="4" regNo="SEU/IS/20/ICT/045">
  <name>Sagara</name>
  <department>ICT</department>
  <gpa>2.0</gpa>
</student>
<student id="5" regNo="SEU/IS/20/BST/026">
  <name>Amani</name>
  <department>BST</department>
  <gpa>3.0</gpa>
</student>
</students>
```



Students List

| Name | GPA |
|--------------------|-----|
| Pasan Kalhara | 3.8 |
| Tharushi Randhula | 4.0 |
| Ishara Madhushanka | 3.9 |

Q06.

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Q06</title>
</head>
<body>
  <p><strong>Old Book Table</strong></p>
  <table id="oldlist" border="1">
    <tr>
      <th>Title</th>
      <th>Author</th>
      <th>Price</th>
    </tr>
  </table>

  <p><strong>Updated Book Table</strong></p>
  <table id="UpdateList" border="1">
    <tr>
      <th>Title</th>
      <th>Author</th>
      <th>Price</th>
    </tr>
  </table>

  <script>
    const oldlist = document.getElementById("oldlist");
    const updatelist = document.getElementById("UpdateList");
    const parser = new DOMParser();

    fetch('library.xml')
      .then(response => response.text())
      .then(xmlText => {
        const xmlDoc = parser.parseFromString(xmlText, 'text/xml');
        const books = xmlDoc.getElementsByTagName('book');

        for (let i = 0; i < books.length; i++) {
          const title =
books[i].getElementsByTagName('title')[0]?.textContent.trim() || '';
```



```

        const author =
books[i].getElementsByTagName('author')[0]?.textContent.trim() || '';
        const price =
books[i].getElementsByTagName('price')[0]?.textContent.trim() || '';

        const row = document.createElement('tr');
        row.innerHTML = `
            <td>${title}</td>
            <td>${author}</td>
            <td>${price}</td>
        `;
        oldlist.appendChild(row);
    }

    if (books[1]) {
        const priceNode = books[1].getElementsByTagName('price')[0];
        if (priceNode) {
            priceNode.textContent = '4000.00';
        }
    }

    for (let i = 0; i < books.length; i++) {
        const title =
books[i].getElementsByTagName('title')[0]?.textContent.trim() || '';
        const author =
books[i].getElementsByTagName('author')[0]?.textContent.trim() || '';
        const price =
books[i].getElementsByTagName('price')[0]?.textContent.trim() || '';

        const row = document.createElement('tr');
        row.innerHTML = `
            <td>${title}</td>
            <td>${author}</td>
            <td>${price}</td>
        `;
        updatelist.appendChild(row);
    }

})
.catch(err => {
    console.error('Failed to load or parse library.xml:', err);
    const li = document.createElement('li');
    li.textContent = 'Failed to load library data.';

```

```

        oldlist.appendChild(li);
        updatelist.appendChild(li.cloneNode(true));
    });
</script>
</body>
</html>

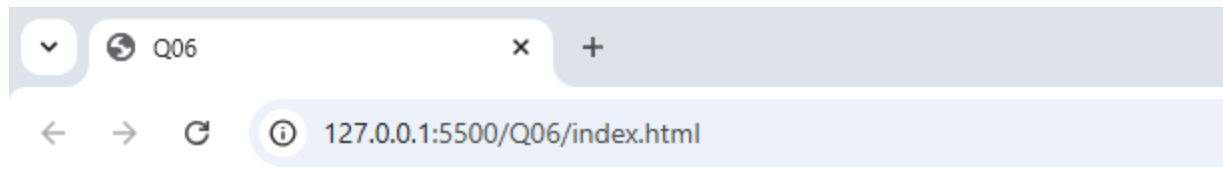
```

library.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<library>
    <book id="1" isbn="S001" category="ICT">
        <title>C++</title>
        <author>Saman Ekanayaka</author>
        <price>1000.00</price>
    </book>
    <book id="2" isbn="S003" category="Engineering">
        <title>Moter Macanic</title>
        <author>Kavidhu Rathnayaka</author>
        <price>12000.00</price>
    </book>
    <book id="3" isbn="S015" category="BST">
        <title>BST</title>
        <author>Sagara</author>
        <price>1000.00</price>
    </book>
    <book id="4" isbn="S033" category="English">
        <title>Romiyo Juliat</title>
        <author>Rathnayaka</author>
        <price>3000.00</price>
    </book>
    <book id="5" isbn="S063" category="Net Working">
        <title>Net Working</title>
        <author>Kavidhu Rathnayaka</author>
        <price>1000.00</price>
    </book>
</library>

```



Old Book Table

| Title | Author | Price |
|---------------|--------------------|----------|
| C++ | Saman Ekanayaka | 1000.00 |
| Moter Macanic | Kavidhu Rathnayaka | 12000.00 |
| BST | Sagara | 1000.00 |
| Romiyo Juliat | Rathnayaka | 3000.00 |
| Net Working | Kavidhu Rathnayaka | 1000.00 |

Updated Book Table

| Title | Author | Price |
|---------------|--------------------|---------|
| C++ | Saman Ekanayaka | 1000.00 |
| Moter Macanic | Kavidhu Rathnayaka | 4000.00 |
| BST | Sagara | 1000.00 |
| Romiyo Juliat | Rathnayaka | 3000.00 |
| Net Working | Kavidhu Rathnayaka | 1000.00 |

Q07.

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Q07</title>
</head>
<body>
  <p><strong>Old Book Table</strong></p>
  <table id="oldlist" border="1">
    <tr>
```

```

        <th>Title</th>
        <th>Author</th>
        <th>Price</th>
    </tr>
</table>

<p><strong>Updated Book Table</strong></p>
<table id="UpdateList" border="1">
    <tr>
        <th>Title</th>
        <th>Author</th>
        <th>Price</th>
    </tr>
</table>

<script>
    const oldlist = document.getElementById("oldlist");
    const updatelist = document.getElementById("UpdateList");
    const parser = new DOMParser();

    fetch('library.xml')
        .then(response => response.text())
        .then(xmlText => {
            const xmlDoc = parser.parseFromString(xmlText, 'text/xml');
            const books = xmlDoc.getElementsByTagName('book');

            for (let i = 0; i < books.length; i++) {
                const title =
books[i].getElementsByTagName('title')[0]?.textContent.trim() || '';
                const author =
books[i].getElementsByTagName('author')[0]?.textContent.trim() || '';
                const price =
books[i].getElementsByTagName('price')[0]?.textContent.trim() || '';

                const row = document.createElement('tr');
                row.innerHTML = `
                    <td>${title}</td>
                    <td>${author}</td>
                    <td>${price}</td>
                `;
                oldlist.appendChild(row);
            }

            if (books[1]) {
                const priceNode = books[1].getElementsByTagName('price')[0];

```

```

        if (priceNode) {
            priceNode.textContent = '4000.00';
        }
    }
    const newBook = xmlDoc.createElement('book');

    const newTitle = xmlDoc.createElement('title');
    newTitle.textContent = 'XML DOM Guide';
    newBook.appendChild(newTitle);

    const newAuthor = xmlDoc.createElement('author');
    newAuthor.textContent = 'Rahul';
    newBook.appendChild(newAuthor);

    xmlDoc.documentElement.appendChild(newBook);
    const updatedBooks = xmlDoc.getElementsByTagName('book');
    for (let i = 0; i < updatedBooks.length; i++) {
        const title =
updatedBooks[i].getElementsByTagName('title')[0]?.textContent.trim() || '';
        const author =
updatedBooks[i].getElementsByTagName('author')[0]?.textContent.trim() || '';
        const price =
updatedBooks[i].getElementsByTagName('price')[0]?.textContent.trim() || '';

        const row = document.createElement('tr');
        row.innerHTML = `
            <td>${title}</td>
            <td>${author}</td>
            <td>${price}</td>
        `;
        updatelist.appendChild(row);
    }
})
.catch(err => {
    console.error('Failed to load or parse library.xml:', err);
    const row = document.createElement('tr');
    row.innerHTML = `<td colspan="3">Failed to load library data.</td>`;
    oldlist.appendChild(row.cloneNode(true));
    updatelist.appendChild(row);
});
</script>
</body>

```

```
</html>
```

library.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<library>
  <book id="1" isbn="S001" category="ICT">
    <title>C++</title>
    <author>Saman Ekanayaka</author>
    <price>1000.00</price>
  </book>
  <book id="2" isbn="S003" category="Engineering">
    <title>Moter Macanic</title>
    <author>Kavidhu Rathnayaka</author>
    <price>12000.00</price>
  </book>
  <book id="3" isbn="S015" category="BST">
    <title>BST</title>
    <author>Sagara</author>
    <price>1000.00</price>
  </book>
  <book id="4" isbn="S033" category="English">
    <title>Romiyo Juliat</title>
    <author>Rathnayaka</author>
    <price>3000.00</price>
  </book>
  <book id="5" isbn="S063" category="Net Working">
    <title>Net Working</title>
    <author>Kavidhu Rathnayaka</author>
    <price>1000.00</price>
  </book>
</library>
```

Old Book Table

| Title | Author | Price |
|---------------|--------------------|----------|
| C++ | Saman Ekanayaka | 1000.00 |
| Moter Macanic | Kavidhu Rathnayaka | 12000.00 |
| BST | Sagara | 1000.00 |
| Romiyo Juliat | Rathnayaka | 3000.00 |
| Net Working | Kavidhu Rathnayaka | 1000.00 |

Updated Book Table

| Title | Author | Price |
|---------------|--------------------|---------|
| C++ | Saman Ekanayaka | 1000.00 |
| Moter Macanic | Kavidhu Rathnayaka | 4000.00 |
| BST | Sagara | 1000.00 |
| Romiyo Juliat | Rathnayaka | 3000.00 |
| Net Working | Kavidhu Rathnayaka | 1000.00 |
| XML DOM Guide | Rahul | |

Q07.

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Q08</title>
</head>
<body>
  <p><strong>Old Book Table</strong></p>
  <table id="oldlist" border="1">
    <tr>
      <th>Title</th>
      <th>Author</th>
      <th>Price</th>
    </tr>
  </table>

  <p><strong>Updated Book Table</strong></p>
  <table id="UpdateList" border="1">
    <tr>
      <th>Title</th>
      <th>Author</th>
      <th>Price</th>
```

```

    </tr>
</table>

<script>
    const oldlist = document.getElementById("oldlist");
    const updatelist = document.getElementById("UpdateList");
    const parser = new DOMParser();

    fetch('library.xml')
        .then(response => response.text())
        .then(xmlText => {
            const xmlDoc = parser.parseFromString(xmlText, 'text/xml');
            const books = xmlDoc.getElementsByTagName('book');

            for (let i = 0; i < books.length; i++) {
                const title =
books[i].getElementsByTagName('title')[0]?.textContent.trim() || '';
                const author =
books[i].getElementsByTagName('author')[0]?.textContent.trim() || '';
                const price =
books[i].getElementsByTagName('price')[0]?.textContent.trim() || '';
                const row = document.createElement('tr');
                row.innerHTML = `
                    <td>${title}</td>
                    <td>${author}</td>
                    <td>${price}</td>
                `;
                oldlist.appendChild(row);
            }

            if (books[1]) {
                const priceNode = books[1].getElementsByTagName('price')[0];
                if (priceNode) {
                    priceNode.textContent = '4000.00';
                }
            }

            if (books[0]) {
                const priceNode = books[0].getElementsByTagName('price')[0];
                if (priceNode) {
                    books[0].removeChild(priceNode);
                }
            }

            const newBook = xmlDoc.createElement('book');

```



```

    const newTitle = xmlDoc.createElement('title');
    newTitle.textContent = 'XML DOM Guide';
    newBook.appendChild(newTitle);
    const newAuthor = xmlDoc.createElement('author');
    newAuthor.textContent = 'Rahul';
    newBook.appendChild(newAuthor);
    xmlDoc.documentElement.appendChild(newBook);

    const updatedBooks = xmlDoc.getElementsByTagName('book');
    for (let i = 0; i < updatedBooks.length; i++) {
        const title =
updatedBooks[i].getElementsByTagName('title')[0]?.textContent.trim() || '';
        const author =
updatedBooks[i].getElementsByTagName('author')[0]?.textContent.trim() || '';
        const price =
updatedBooks[i].getElementsByTagName('price')[0]?.textContent.trim() || '';
        const row = document.createElement('tr');
        row.innerHTML = `
            <td>${title}</td>
            <td>${author}</td>
            <td>${price}</td>
        `;
        updatelist.appendChild(row);
    }
})
.catch(err => {
    console.error('Failed to load or parse library.xml:', err);
    const row = document.createElement('tr');
    row.innerHTML = `<td colspan="3">Failed to load library data.</td>`;
    oldlist.appendChild(row.cloneNode(true));
    updatelist.appendChild(row);
});
</script>
</body>
</html>

```

library.xml

```

<?xml version="1.0" encoding="UTF-8"?>
<library>
  <book id="1" isbn="S001" category="ICT">
    <title>C++</title>
    <author>Saman Ekanayaka</author>
    <price>1000.00</price>
  </book>

```

```

</book>
<book id="2" isbn="S003" category="Engineering">
  <title>Moter Macanic</title>
  <author>Kavidhu Rathnayaka</author>
  <price>12000.00</price>
</book>
<book id="3" isbn="S015" category="BST">
  <title>BST</title>
  <author>Sagara</author>
  <price>1000.00</price>
</book>
<book id="4" isbn="S033" category="English">
  <title>Romiyo Juliat</title>
  <author>Rathnayaka</author>
  <price>3000.00</price>
</book>
<book id="5" isbn="S063" category="Net Working">
  <title>Net Working</title>
  <author>Kavidhu Rathnayaka</author>
  <price>1000.00</price>
</book>
</library>

```

Old Book Table

| Title | Author | Price |
|---------------|--------------------|----------|
| C++ | Saman Ekanayaka | 1000.00 |
| Moter Macanic | Kavidhu Rathnayaka | 12000.00 |
| BST | Sagara | 1000.00 |
| Romiyo Juliat | Rathnayaka | 3000.00 |
| Net Working | Kavidhu Rathnayaka | 1000.00 |

Updated Book Table

| Title | Author | Price |
|---------------|--------------------|---------|
| C++ | Saman Ekanayaka | |
| Moter Macanic | Kavidhu Rathnayaka | 4000.00 |
| BST | Sagara | 1000.00 |
| Romiyo Juliat | Rathnayaka | 3000.00 |
| Net Working | Kavidhu Rathnayaka | 1000.00 |
| XML DOM Guide | Rahul | |