

A₁: /**descendant**::section/**child**::p[[position](#)()=2]
 A₂: /**descendant**::section/**descendant**::p[[position](#)()=2]

 A₃: /**descendant**::section//p[[position](#)()=2]

 A₄: (/**descendant**::section/**descendant**::p)[[position](#)()=2]
 A₅: (/**descendant**::section/**child**::p) [[position](#)()=2]

 A₆: /**descendant**::section/**child**::p[[contains](#)(**self**::[node](#)(), "SSD")] [[position](#)()=2]
 A₇: /**descendant**::section/**child**::p[[position](#)()=2] [[contains](#)(**self**::[node](#)(), "SSD")]

```

1 <?xml version="1.0" ?>
2 <!--DOCTYPE book SYSTEM "book.dtd" -->
3 <book>
4   <title>Data on the Web</title>
5   <author>Serge Abiteboul</author>
6   <author>Peter Buneman</author>
7   <author>Dan Suciu</author>
8   <section id="intro" difficulty="easy" >
9     <title>Introduction</title>
10    <p> #1 p <!-- ... --></p>
11    <section>
12      <title>Audience</title>
13      <p> #2 p <!-- ... --> </p>
14    </section>
15    <section>
16      <title>Web Data and the Two Cultures</title>
17      <p> #3 p <!-- ... --> </p>
18      <figure height="400" width="400" >
19        <title>Traditional client/server architecture</title>
20        <image source="csarch.gif" />
21      </figure>
22      <p> #4 p <!-- ... --> </p>
23    </section>
24  </section>
25  <part>
26    <title>An Imaginary First Part</title>
27    <section id="syntax" difficulty="medium" >
28      <title>A Syntax For Data</title>
29      <p> #5 p <ref idref="syntax" /> </p>
30      <figure height="200" width="500" >
31        <title>Graph representations of structures</title>
32        <image source="graphs.gif" />
33      </figure>
34      <p> #6 p on SSD <!-- ... --></p>
35      <section>
36        <title>Audience</title>
37        <p> #7 p <!-- ... --></p>
38      </section>
39      <section>
40        <title>Base Types</title>
41        <p> #8 p about SSD <ref idref="introsyntax" /> </p>
42      </section>
43      <section>
44        <title>Representing Relational Databases</title>
45        <p> #9 p <!-- ... --></p>
46        <figure height="250" width="400" >
47          <title>Examples of Relations</title>
48          <image source="relations.gif" />
49        </figure>
50      </section>
51      <section>
52        <title>Representing Object Databases</title>
53        <p> #10 p <!-- ... --></p>
54      </section>
55    </section>
56  </part>
</book>

```

```
<!DOCTYPE net SYSTEM "net.dtd">
<net>
  <vertex
    id="n0"
    links="n1 n3"
  />
  <vertex
    id="n1"
    links="n0 n2 n4"
  />
  <vertex
    id="n2"
    links="n1 n4"
  />
  <vertex
    id="n3"
    links="n0 n4"
  />
  <vertex
    id="n4"
    links="n2 n3"
  />
  <vertex
    id="n5"
    links=""
  />
</net>
```

matrix-summed-up.xml

```
<?xml version="1.0"?>
<matrix>
  <row>
    <cell>1</cell>
    <cell>2</cell>
    <cell>3</cell>
  </row>
  <row>
    <cell>4</cell>
    <cell>5</cell>
    <cell>6</cell>
  </row>
  <row>
    <cell>7</cell>
    <cell>8</cell>
    <cell>9</cell>
  </row>
</matrix>
```

```
<?xml version="1.0"?>
<matrix>
  <row>
    <cell>1</cell>
    <cell>2</cell>
    <cell>3</cell>
    <cell>6</cell>
  </row>
  <row>
    <cell>4</cell>
    <cell>5</cell>
    <cell>6</cell>
    <cell>15</cell>
  </row>
  <row>
    <cell>7</cell>
    <cell>8</cell>
    <cell>9</cell>
    <cell>24</cell>
  </row>
  <row>
    <cell>12</cell>
    <cell>15</cell>
    <cell>18</cell>
    <cell>45</cell>
  </row>
</matrix>
```

```

1 let $doc := doc("matrix.xml")
2 return
3 <matrix>
4 {
5   for $row in $doc/child::matrix/child::row
6   let $cols := $row/child::cell
7   return <row>
8     { $cols }
9 }
10 </row>
11 }
12 .....
13 .....
14 .....
15 .....
16 .....
17 .....
18 .....
19 .....
20 .....
21 .....
22 .....
23 .....
24 .....
25 </matrix>

```