

## XQuery (2)

### Exercise 1:

Using the XML Document below, with the URI „bib.xml“ (library with books), define the following queries in XQuery:

- a.) Give the titles of all Books sorted by Price.
- b.) How many books were written by Abiteboul?
- c.) Give for each author, the number of books he has written.

```
<?xml version="1.0"?>
<bib>
  <book year="1994">
    <title>TCP/IP Illustrated</title>
    <author>Stevens</author>
    <publisher>Addison-Wesley</publisher>
    <price>65.95</price>
  </book>
  <book year="1994">
    <title>Principles of Databases</title>
    <author>Abiteboul</author>
    <publisher>Addison-Wesley</publisher>
    <price>35.89</price>
  </book>
  <book year="1992">
    <title>Advanced Programming in the Unix environment</title>
    <author>Stevens</author>
    <publisher>Addison-Wesley</publisher>
    <price>65.95</price>
  </book>
  <book year="2000">
    <title>Data on the Web</title>
    <author>Abiteboul</author>
    <author>Buneman</author>
    <author>Suciu</author>
    <publisher>Morgan Kaufmann Publishers</publisher>
  </book>
</bib>
```

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<price> 39.95</price>
</book>
<book year="1992">
  <title>The Economics of Technology and Content for Digital TV</title>
  <editor>
    Gerbarg
    <affiliation>CITI</affiliation>
  </editor>
  <publisher>Kluwer Academic Publishers</publisher>
  <price>129.95</price>
</book>
</bib>
```

### **Exercise 2: Surprising XQuery**

1. Prove that in XQuery  $1=2$
2. Prove that if  $\$x > \$y$  and  $\$y > \$z$ ,  $\$x > \$z$  is not necessarily true