

**Open the SigmodRecord.xml data source, solve the following exercises**

1. extract all articles

```
doc('SigmodRecord.xml')//article  
doc('SigmodRecord.xml')/SigmodRecord/issue/articles/article
```

2. extract all authors

```
doc('SigmodRecord.xml')/SigmodRecord/issue/articles/article/authors/author  
//author
```

3. extract all authors (no duplicates)

```
count(distinct-values(//author/text()))  
-> vs count(//author/text())
```

4. given a node (initPage) select its parent

```
//initPage/..
```

5. select all the titles of papers with a single author (no XQuery allowed)

```
//authors[count(author)<2]/../title
```

6. select all authors that published as second authors (second position)

```
distinct-values(//author[@position="01"])
```

7. select all titles of papers with only two authors

```
//authors[count(author)=2]/../title
```

8. same as above but without the function count()

```
//author[@position="01" and position()=last()]/../title
```

9. demo of axes, select all parents of authors element

```
//authors/parent::*
```

10. BaseX unsupported features example, get all authors in fourth and fifth position

```
//author[3 to 4]
```

11. abbreviated syntax, get all document attributes

```
//@*
```

12. get the text of each element that has at least one attribute

```
//@*../text()
```

**Switch to factbook.xml file**

13. get the parent of each element that has text

```
//text()/..
```

14. get the name of all elements whose text is 'Afghanistan'

```
//*[text()="Afghanistan"]/name()
```

15. print a country and its GDP

```
//country | //GDP_per_capita
```