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 at 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 withouth 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. abbrevited sintax, 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 father 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