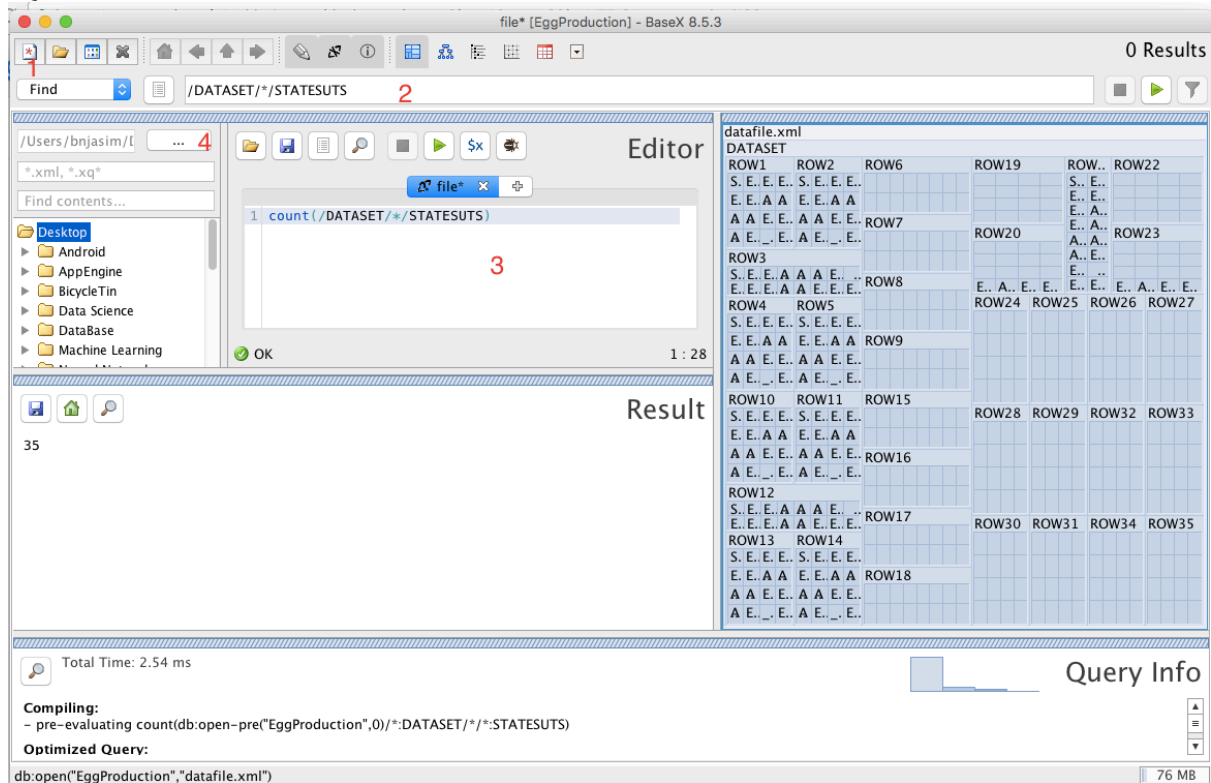


Quick Introduction to BaseX UI



1. Click on the * to create a new XML database and load the XML data provided
2. The explorer. You can write simple XPath queries here. Start by typing / and press Enter to see the whole data. (You shouldn't write functions like count() here)
3. Write XPath/XQuery Queries here. Press the green arrow to run the query
4. You can also write your queries in files and load using this button or save your query in 3.

Practice Questions

Load the xml data 'egg production in various states' to create an XML database and do the following tasks

(Assume 'States' include union territories as well)

XPath

1. Find all states in the data? Ans: /DATASET/*/STATESUTS
2. What is the output of the following Query: /DATASET/*/STATESUTS/text() ?
3. Count the number of states
4. Which all states' name contain 'Pradesh'?
5. Find the states where the egg production (in 2011-2012) in lakh exceeded 100000
6. Find the egg production (in 2011-2012) of Bihar?
Hint: you can use text() = "Bihar"
7. Find the lowest egg production in 2011_2012? Hint: use min()
8. Find the state with the lowest egg production? (Note: This is kind of join in SQL)

XQuery

9. using XQuery, insert an entry corresponding to Telangana with egg production in 2011_2012 as 6500 (Hint:

```
let $p := <ROW36><STATESUTS>Telangana</STATESUTS>...</ROW36>
return
insert node $p as last into doc('datafile.xml')/DATASET
```

10. Retrieve the names of all states in alphabetic order (Is this possible in XPath?)
11. Find all 5 letter states using XQuery FLOWR expression? (use string-length function)
Can you do the above using XPath only?
12. Reformat the whole document into a new xml document as described below (only egg production in lakhs of years 2009, 2010, 2011 and 2012 are to be considered)

```
<DATASET>
  <STATE>
    <STATE-NAME>Andhra Pradesh</STATE-NAME>
    <EGG-PRODUCTION>
      <2009> 183446 </2009>
      <2010> 193958 </2010>
      <2011> 201277 </2011>
      <2012> 212103 </2012>
    </EGG-PRODUCTION>
  </STATE>
  <STATE>
    ...
  </STATE>
  ...
</DATASET>
```