

XML Programming

Exercise 1: XML Programming

A.) Use the **flights_data_no_nesting.xml** example to implement the following functionality, which is now written in XQuery:

```
let $doc := doc('flights_data_no_nesting.xml')
do update insert <Reservation>
  <date>2006-12-26</date>
  <flightRef>LX183</flightRef>
  <passRef>000111</passRef>
</Reservation>
before $doc/Reservation[1]
```

Write more implementations, using:

- a. DOM
- b. SAX
- c. StAX
- d. XSLT
- e. XQuery
- f. XML/SQL

B.) Compare the implementation effort in terms of:

1. Number of operations needed.
2. Memory needed – estimation in terms of N (size of document), H (maximal depth of the document). (only for DOM and SAX).