

XQuery (I)

Exercise 1: Basic XQuery

Consider the XML document provided as a separate download (Flights.zip) – it corresponds to the model created for Exercise 2/3 (Exercise Sheet1).

Write the XQuery expressions for solving the following problems. Your results should be valid XML:

1. Give the list of the direct flights on the date of '2006-12-24' which have „North Pole“ (airport name) as the source airport.
2. Retrieve the list of the busiest airports on the date of '2006-12-24' (based on the number of departures and arrivals).
3. Identify all the flight destinations of the Passenger ‚Santa Claus‘.
4. Consider the case of combined flights (two or more). (As an example, flying from London to Zurich on the date of 2006-12-22 might mean taking two separate flights: London-Amsterdam AND Amsterdam-Zurich, both on the same date).

Retrieve all flight possibilities from ‚North Pole‘ to ‚SouthPole‘, on the date of '2006-12-24' with one or two intermediate stops.

Note: For the last question, the schema needs to be enhanced so that Flight also has the attribute ‚departure‘ (time of the flight) and ‚arrival‘ (arrival time of the flight).

Exercise 2: Use OxygenXML oder SaxonB (<http://saxon.sourceforge.net/>) to run the queries on your XML instance.