

Faculty of Science

**Course**: CSCI 3030U Database Systems & Concepts

Lab 10 (graph databases)

You can use the following online tool to write XML documents and XQueries.

http://videlibri.sourceforge.net/cgi-bin/xidelcgi

1. Toy Example

XML Document

<BARS>

<BAR><NAME>Joe’s Bar</NAME>

<BEER><NAME>Bud</NAME>

<PRICE>2.50</PRICE></BEER>

<BEER><NAME>Miller</NAME>

<PRICE>3.00</PRICE></BEER>

</BAR>

</BARS>

Given the provided XML document what is the output of following XQueries?

1. XQuery 1

xquery version "3.0";

BARS/BAR/BEER

1. XQuery 2

xquery version "3.0";

for $beer in BARS/BAR/BEER

where $beer/PRICE > 2.5

order by $beer/PRICE

return $beer

1. Provide XML document that includes information about sample movies: title, year of production, budget, director, rating, duration. You should also include information about actors playing in the movies: name, age, country. Include in your XML database information about 3 movies and for each movie provide sample 2 actors.

1. Write two XQueries
   1. List all actors in your XML document that are younger than 35. Arrange the actors by their age increasingly.
   2. List all movies that were produced from 2016 to 2018. Arrange the movies alphabetically in descending order by title.

Save XML document (Question 2) and XQueries (Question 3) as well as the results of XQueries in Question 1 and Question 3.

For more information about XML see the lecture slides and w3schools tutorial: https://www.w3schools.com/xml/