

# CMPT 354 –Database Systems I (Section D100)

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## Assignment #10

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Total Marks: 50 (5% of the Individual Assignments)

Due Date: Nov 25, 14:30 (via the Online Submission Server)

For this assignment, you have no tools to evaluate the XPath/XQuery you write. To get around this, I found a website which evaluates XPaths, and I wrote a little utility to evaluate XQueries. Please use them to ensure your assignment is correct. Include both the input XPath/XQuery and output result.

**XPath Questions)** [3 marks each] Refer to: [http://www.w3schools.com/xpath/xpath\\_examples.asp](http://www.w3schools.com/xpath/xpath_examples.asp)

For the below questions, use the XML from the above page, which contains an XML structure for a bookstore. Note that there is a 'Try it yourself' link on the above page which allows you to modify the code and see the results. Please test your queries to ensure that your XPath works.

**Q1)** Select all books published after 2003.

**Q2)** Display the categories of books available.

**Q3)** Display the 2<sup>nd</sup> author in the database.

**Q4)** Display the language of the first book.

**Q5)** Display only the book titles that are categorized for the web.

**XQuery Questions)** [7 marks each] Refer to the books.xml included as part of this assignment. You can also find it here: <http://msdn.microsoft.com/en-us/library/ms762271%28VS.85%29.aspx>

**Q6)** Calculate the number of books with price > 30\$.

**Q7)** Find all fantasy books.

**Q8)** Find all books with price greater than the average of all books.

**Q9)** Display all distinct authors, ordered alphabetically.

**Q10)** Display all distinct authors, and the books they wrote.