IMY 210
Theme Assignment 5: XQuery

Create three query files (q#.xq) that will transverse and retrieve data from the provided XML (cd.xml) source. The queries can be directly inserted into a XQuery interface or saved as an .xq file to be executed later, for this practical we will do the later. The result of the query should only display the relevant data and not the associated nodes from the XML file.

Provided files

cd.xml – A sample XML file that needs to be validated by your final XML schema.

Task

Basic selection and Arithmetic functions – q1.xq

Your query should…

> Work out the total amount of money (**PRICE**) a customer will need to pay if they were to buy a copy of every CD displayed in the XML file, round off the final value if there are any decimal places

> **Note:** In many cases when executing a XQuery statement, the result will be rendered and interpreted as XML. This means, in some cases, the result presented should still follow the XML grammar and specification rulesets.

Element construction – q2.xq

Your query should…

I. Display all the information of all CD published before (including) the **YEAR** 1987.

II. The format for the CD should be **ordered by** the **TITLE** and displayed in a html list.
> {Title} by {Artist} – {Company}, {Country}

> **E.g.**

> Red by The Communards – London, UK

*Remember to include the <list> element as the root node

Nested Returns – q3.xq

Your query should…

I. Count all the **CD** in the document

II. Separate the **CD** by cost (**PRICE**) more than the value of 9 and cost less than the value of 9.

III. Count how many CD are in each category

IV. Sort this result by their **COUNTRY**.

V. If there are several **CD** originating from the same **COUNTRY**, sort those **CD** within the **COUNTRY** by **TITLE**.

VI. Display only the **TITLE** of the **CD**

The result will look like...

```
<TOTAL>##</TOTAL>
 <ABOVE>
        <COUNT>##</COUNT>
        <TITLE> </TITLE> (more titles here)
</ABOVE>
 <BELOW>
        <COUNT>##</COUNT>
        <TITLE> </TITLE> (more titles here)
 </BELOW>
*Remember to include the <HTML> element as the root node
```

Remember to add your details to every XQuery file. XQuery comment format encapsulates the comment in (: :)

e.g. **(:** This is a comment **:)**

Submission

- **Compress** your three queries (q#.xq) into an archive named **TA5.zip**.
- Submit your ZIP file to the upload slot provided on clickUP before the deadline.
- Ensure that you have a backup of your final submission.