

In these exercises, you will be working with a small XML data set drawn from the Stanford course catalog. There are multiple departments, each with a department chair, some courses, and professors and/or lecturers who teach courses. The XML data is [here](#).

**Instructions:** Each problem asks you to write a query in XSLT. When you click "Check Answer" our back-end runs your query against the sample database using Saxon. It displays the result and compares your answer against the correct one. When you're satisfied with your solution for a given problem, click the "Submit" button to check your answer.

You may perform these exercises as many times as you like, so we strongly encourage you to keep working with them until you complete the exercises with full credit.

### Q1 (1 point possible)

Return all courses with enrollment greater than 500. Retain the structure of Course elements from the original data.

Your solution should fill in the following stylesheet:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<xsl:stylesheet version="2.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:template match=...>
    ... template body ...
  </xsl:template>
  ... more templates as needed ...
</xsl:stylesheet>
```

**Note:** You do not need to use "doc(..)" in your solution. It will be executed on courses.xml.

*(XSLT can be quite challenging to get right, and this problem is no exception. Congratulations if you succeed!)*

1 Enter your XSLT stylesheet here

Unanswered

Submit

### Q2 (1 point possible)

Remove from the data all courses with enrollment greater than 60, or with no enrollment listed. Otherwise the structure of the data should be the same.

Your solution should fill in the following stylesheet:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<xsl:stylesheet version="2.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:template match=...>
    ... template body ...
  </xsl:template>
  ... more templates as needed ...
</xsl:stylesheet>
```

**Note:** You do not need to use "doc(..)" in your solution. It will be executed on courses.xml.

*(XSLT can be quite challenging to get right, and this problem is no exception. Congratulations if you succeed!)*

1 Enter your XSLT stylesheet here

Unanswered

Submit

### Q3 (1 point possible)

Create a summarized version of the EE part of the course catalog. For each course in EE, return a Course element, with its Number and Title as attributes, its Description as a subelement, and the last name of each instructor as an Instructor subelement. Discard all information about department titles, chairs, enrollment, and prerequisites, as well as all courses in departments other than EE. (Note: To specify quotes within an already-quoted XPath expression, use quot;.)

Your solution should fill in the following stylesheet:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<xsl:stylesheet version="2.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:template match=...>
    ... template body ...
  </xsl:template>
  ... more templates as needed ...
</xsl:stylesheet>
```

**Note:** You do not need to use "doc(..)" in your solution. It will be executed on courses.xml.

*(XSLT can be quite challenging to get right, and this problem is particularly difficult. Extra congratulations if you succeed!)*

1 Enter your XSLT stylesheet here

Unanswered

Submit

#### Q4 (1 point possible)

Create an HTML table with one-pixel border that lists all CS department courses with enrollment greater than 200. Each row should contain three cells: the course number in italics, course title in bold, and enrollment. Sort the rows alphabetically by course title. No header is needed. (Note: For formatting, just use "table border=1", and "<b>" and "<i>" tags for bold and italics respectively. To specify quotes within an already-quoted XPath expression, use quot;.)

Your solution should fill in the following stylesheet:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<xsl:stylesheet version="2.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:template match=...>
    ... template body ...
  </xsl:template>
  ... more templates as needed ...
</xsl:stylesheet>
```

**Note:** You do not need to use "doc(..)" in your solution. It will be executed on courses.xml.

*(XSLT can be quite challenging to get right, and this problem is particularly difficult. Extra congratulations if you succeed!)*

1 Enter your XSLT stylesheet here

Unanswered

Submit

