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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

1.0/1.0 point (graded)
Return a list of department titles.

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 <?xml version="1.0" encoding="ISO-8859-1"?>
2 <xsl:stylesheet version="2.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
3    <xsl:template match="Department">
4        <Title><xsl:value-of select="Title" /></Title>
5    </xsl:template>
6 </xsl:stylesheet>
```

Press ESC then TAB or click outside of the code editor to exit

Correct

Correct

Your Query Result:

```
<Title>Computer Science</Title>
<Title>Electrical Engineering</Title>
<Title>Linguistics</Title>
```

Expected Query Result:

```
<Title>Computer Science</Title>
<Title>Electrical Engineering</Title>
<Title>Linguistics</Title>
```

Submit

Q2

1.0/1.0 point (graded)

Return a list of department elements with no attributes and two subelements each: the department title and the entire Chair subelement structure.

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!)

```
<?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="Department">
       <Department>
           <Title><xsl:value-of select="Title" /></Title>
           <xsl:copy-of select="./Chair" />
       </Department>
   </xsl:template>
</xsl:stylesheet>
```

Press ESC then TAB or click outside of the code editor to exit

Correct

Correct

Your Query Result:

```
<Department>
  <Title>Computer Science</Title>
  <Chair>
    <Professor>
      <First_Name>Jennifer</First_Name>
      <Last_Name>Widom</Last_Name>
    </Professor>
  </Chair>
</Department>
<Department>
  <Title>Electrical Engineering</Title>
  <Chair>
    <Professor>
      <First_Name>Mark</First_Name>
      <Middle_Initial>A.</Middle_Initial>
      <Last_Name>Horowitz</Last_Name>
    </Professor>
  </Chair>
</Department>
<Department>
  <Title>Linguistics</Title>
  <Chair>
    <Professor>
      <First_Name>Beth</First_Name>
      <Last_Name>Levin</Last_Name>
    </Professor>
  </Chair>
</Department>
```

Expected Query Result:

```
<Department>
  <Title>Computer Science</Title>
  <Chair>
    <Professor>
      <First_Name>Jennifer</First_Name>
      <Last_Name>Widom</Last_Name>
    </Professor>
  </Chair>
</Department>
<Department>
  <Title>Electrical Engineering</Title>
  <Chair>
    <Professor>
      <First_Name>Mark</First_Name>
      <Middle_Initial>A.</Middle_Initial>
      <Last_Name>Horowitz</Last_Name>
    </Professor>
  </Chair>
</Department>
<Department>
  <Title>Linguistics</Title>
  <Chair>
    <Professor>
      <First_Name>Beth</First_Name>
      <Last_Name>Levin</Last_Name>
    </Professor>
  </Chair>
</Department>
```

Submit