

Exercise – 7
XML and Semantic Web Technologies – SoSe 2012
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Q1: Look at the following XML course document.

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<page>

  <b><a href="../../index_en.html">Courses in summer term 2012</a> / <a href="../../index_en.html"> Lecture Semantic Web</a>
  / Script:</b>

  <subsections>
    <subsection href="../../index_en">Abstract</subsection>
    <subsection href=".">Script</subsection>
    <subsection href="../../exercises/index_en">Exercises</subsection>
  </subsections>

  <h3>Slides:</h3>
  <script>
    <section date="17.04.2012" pdf="xmlsemtech-01-overview-2up.pdf">Overview: XML and Semantic Web
    Technologies</section>
    <section date="24.04.2012" pdf="xmlsemtech-02-xml-2up.pdf">Unicode,URI,XML Syntax</section>
    <section date="27.04.2012" pdf="xmlsemtech-03-dtds-2up.pdf">Document Type Definition</section>
    <section date="2.05.2012" pdf="DTD-Tutorial.pdf">DTD Tutorial</section>
    <section date="9.05.2012" pdf="xmlsemtech-04a-namespaces.pdf">XML Namespaces</section>
    <section date="10.05.2012" pdf="xmlsemtech-04b-schema.pdf">XML Schema</section>
    <section date="22.05.2012" pdf="xmlsemtech-05-xpath.pdf">XML XPATH</section>
    <section date="05.06.2012" pdf="xmlsemtech-06-xslt.pdf">XML XSLT</section>
    <section date="12.06.2012" pdf="xmlsemtech-07-xquery-2up.pdf">XML XQuery</section>

  </script>
</page>
```

- Restyle this xml document: Reorder the PDF lectures according to their title.
- Number the lessons with 1., 2., 3. and so on
- Create a hyperlink which contains the text of the title and links to the Learn Web

Q2. Apply the given XSLT document to the given XML document. And write down the resulting XML document.

XML:

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<?xml-stylesheet type="text/xsl"
href="album.xsl"?>
<album name="My Funny Valentine"
artist="Chet Baker"
website="http://chetbaker.com">
<track number="2">
```

```

<name>Someone To Watch Over Me</name>
<duration>00:02:58</duration>
<year>1974</year>
</track>
<track number="3">
<name>Moonlight Becomes You</name>
<duration>00:03:51</duration>
<year>1974</year>
</track>
<track number="1">
<name>My Funny Valentine</name>
<duration>00:03:20</duration>
<year>1974</year>
</track>
</album>

```

XSLT:

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<xsl:stylesheet
xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
version="1.0">
<xsl:template match="album">
<html>
<h1> <xsl:value-of select="@name"/> </h1>
Artist: <a href="{ @website }">
<xsl:value-of select="@artist"/>
</a>
<table>
<xsl:for-each select="track">
<xsl:sort data-type="number" select="@number"/>
<tr>
<xsl:for-each select="name">
<td><xsl:apply-templates/></td>
</xsl:for-each>
<xsl:for-each select="duration">
<td>(<xsl:apply-templates/>)</td>
</xsl:for-each>
</tr>
</xsl:for-each>
</table>
</html>
</xsl:template>
</xsl:stylesheet>

```