

HW6: Due Mar 1/Mar 4 -----

Using your CD Catalog XML file, write several short XSLT programs that illustrate the following XSLT language constructs. Your XSLT programs should demonstrate your understanding of the constructs and also demonstrate your ability to create limited, yet illustrative, output. For example, your output should ideally show only a few elements/attributes/text/

- <xsl:call-template>
- The document() function
- conditional logic
- <xsl:param> element
- <xsl:sort> element
- <xsl:copy>
- <xsl:copy-of>
- <xsl:include>
- <xsl:import>
- <xsl:template> mode attribute
- Grouping in XSLT 2.0

My xml:

```
<?xml version="1.0" standalone="no"?>
<!DOCTYPE CATALOG[

<!--<ELEMENT CATALOG (CD*) >
<ELEMENT CD (TITLE,ARTIST,COUNTRY,COMPANY,PRICE,YEAR,TRACK*)>
<ELEMENT TITLE (#PCDATA)>
<ELEMENT ARTIST (#PCDATA)>
<ELEMENT COUNTRY (#PCDATA)>
<ELEMENT COMPANY (#PCDATA)>
<ELEMENT PRICE (#PCDATA)>
<ELEMENT YEAR (#PCDATA)>
<ELEMENT TRACK (#PCDATA)>

<ATTLIST CATALOG xmlns CDATA #REQUIRED>
<ATTLIST CD id ID #REQUIRED>
<ATTLIST CD similarTo IDREFS #IMPLIED>
-->

<ENTITY COMPANY1 "Columbia" >
```

```

<!ENTITY COMPANY2 "CBS Records" >
<!ENTITY COMPANY3 "RCA" >
<!ENTITY COMPANY4 "Virgin records" >
<!ENTITY COMPANY5 "BMG" >
<!ENTITY COMPANY6 "Polydor" >
<!ENTITY COMPANY7 "CBS" >
<!ENTITY COMPANY8 "Pickwick" >
<!ENTITY COMPANY9 "Atlantic" >
<!ENTITY COMPANY10 "Mega" >
<!ENTITY COMPANY11 "Grammy" >
<!ENTITY COMPANY12 "Mucik Master" >
<!ENTITY COMPANY13 "WEA" >
<!ENTITY COMPANY14 "Island" >
<!ENTITY COMPANY15 "Siren" >
<!ENTITY COMPANY16 "Medley" >
<!ENTITY COMPANY17 "Elektra" >
<!ENTITY COMPANY18 "London" >
<!ENTITY COMPANY19 "EMI" >
<!ENTITY COMPANY20 "Epic" >
<!ENTITY COMPANY21 "Sony" >
<!ENTITY COMPANY22 "A and M" >
<!ENTITY COMPANY25 "Capitol" >
<!ENTITY COMPANY24 "DECCA" >
]>
<CATALOG xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
  xsi:noNamespaceSchemaLocation="shiporder.xsd">

  <CD id="C001">
    <TITLE>Empire Burlesque</TITLE>
    <ARTIST>Bob Dylan</ARTIST>
    <COUNTRY>USA</COUNTRY>
    <COMPANY>&COMPANY1;</COMPANY>
    <PRICE>10.90</PRICE>
    <YEAR>1985</YEAR>
  </CD>
  <CD id="C002">
    <TITLE>Hide your heart</TITLE>
    <ARTIST>Bonnie Tyler</ARTIST>
    <COUNTRY>UK</COUNTRY>
    <COMPANY>&COMPANY2;</COMPANY>

```

```
<PRICE>9.90</PRICE>
<YEAR>1988</YEAR>
</CD>
<CD id="C003">
  <TITLE>Greatest Hits</TITLE>
  <ARTIST>Dolly Parton</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>&COMPANY3;</COMPANY>
  <PRICE>9.90</PRICE>
  <YEAR>1982</YEAR>
</CD>
<CD id="C004">
  <TITLE>Still got the blues</TITLE>
  <ARTIST>Gary Moore</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>&COMPANY4;</COMPANY>
  <PRICE>10.20</PRICE>
  <YEAR>1990</YEAR>
</CD>
<CD id="C005">
  <TITLE>Eros</TITLE>
  <ARTIST>Eros Ramazzotti</ARTIST>
  <COUNTRY>EU</COUNTRY>
  <COMPANY>&COMPANY5;</COMPANY>
  <PRICE>9.90</PRICE>
  <YEAR>1997</YEAR>
</CD>
<CD id="C006">
  <TITLE>One night only</TITLE>
  <ARTIST>Bee Gees</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>&COMPANY6;</COMPANY>
  <PRICE>10.90</PRICE>
  <YEAR>1998</YEAR>
</CD>
<CD id="C007">
  <TITLE>Sylvias Mother</TITLE>
  <ARTIST>Dr.Hook</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>&COMPANY7;</COMPANY>
```

```

        <PRICE>8.10</PRICE>
        <YEAR>1973</YEAR>
    </CD>
    <CD id="C008">
        <TITLE>Maggie May</TITLE>
        <ARTIST>Rod Stewart</ARTIST>
        <COUNTRY>UK</COUNTRY>
        <COMPANY>&COMPANY8;</COMPANY>
        <PRICE>8.50</PRICE>
        <YEAR>1990</YEAR>
    </CD>
    <CD id="C009">
        <TITLE>Romanza</TITLE>
        <ARTIST>Andrea Bocelli</ARTIST>
        <COUNTRY>EU</COUNTRY>
        <COMPANY>&COMPANY6;</COMPANY>
        <PRICE>10.80</PRICE>
        <YEAR>1996</YEAR>
    </CD>
    <CD id="C0010"
    similarTo="C0011 C0012 C0022 C0023">
        <TITLE>When a man loves a woman</TITLE>
        <ARTIST>Percy Sledge</ARTIST>
        <COUNTRY>USA</COUNTRY>
        <COMPANY>&COMPANY9;</COMPANY>
        <PRICE>8.70</PRICE>
        <YEAR>1987</YEAR>
    </CD>
    <CD id="C0011"
    similarTo="C0010 C0012 C0022 C0023">
        <TITLE>Black angel</TITLE>
        <ARTIST>Savage Rose</ARTIST>
        <COUNTRY>EU</COUNTRY>
        <COMPANY>&COMPANY10;</COMPANY>
        <PRICE>10.90</PRICE>
        <YEAR>1995</YEAR>
    </CD>
    <CD id="C0012"
    similarTo="C0010 C0011 C0022 C0023">
        <TITLE>1999 Grammy Nominees</TITLE>

```

```
<ARTIST>Many</ARTIST>
<COUNTRY>USA</COUNTRY>
<COMPANY>&COMPANY11;</COMPANY>
<PRICE>10.20</PRICE>
<YEAR>1999</YEAR>
</CD>
<CD id="C0013">
  <TITLE>For the good times</TITLE>
  <ARTIST>Kenny Rogers</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>&COMPANY12;</COMPANY>
  <PRICE>8.70</PRICE>
  <YEAR>1995</YEAR>
</CD>
<CD id="C0014">
  <TITLE>Big Willie style</TITLE>
  <ARTIST>Will Smith</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>&COMPANY1;</COMPANY>
  <PRICE>9.90</PRICE>
  <YEAR>1997</YEAR>
</CD>
<CD id="C0015">
  <TITLE>Tupelo Honey</TITLE>
  <ARTIST>Van Morrison</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>&COMPANY6;</COMPANY>
  <PRICE>8.20</PRICE>
  <YEAR>1971</YEAR>
</CD>
<CD id="C0016">
  <TITLE>Soulsville</TITLE>
  <ARTIST>Jorn Hoel</ARTIST>
  <COUNTRY>Norway</COUNTRY>
  <COMPANY>&COMPANY13;</COMPANY>
  <PRICE>7.90</PRICE>
  <YEAR>1996</YEAR>
</CD>
<CD id="C0017">
  <TITLE>The very best of</TITLE>
```

```
<ARTIST>Cat Stevens</ARTIST>
<COUNTRY>UK</COUNTRY>
<COMPANY>&COMPANY14;</COMPANY>
<PRICE>8.90</PRICE>
<YEAR>1990</YEAR>
</CD>
<CD id="C0018">
  <TITLE>Stop</TITLE>
  <ARTIST>Sam Brown</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>&COMPANY22;</COMPANY>
  <PRICE>8.90</PRICE>
  <YEAR>1988</YEAR>
</CD>
<CD id="C0019">
  <TITLE>Bridge of Spies</TITLE>
  <ARTIST>T'Pau</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>&COMPANY15;</COMPANY>
  <PRICE>7.90</PRICE>
  <YEAR>1987</YEAR>
</CD>
<CD id="C0020">
  <TITLE>Private Dancer</TITLE>
  <ARTIST>Tina Turner</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>&COMPANY25;</COMPANY>
  <PRICE>8.90</PRICE>
  <YEAR>1983</YEAR>
</CD>
<CD id="C0021">
  <TITLE>Midt om natten</TITLE>
  <ARTIST>Kim Larsen</ARTIST>
  <COUNTRY>EU</COUNTRY>
  <COMPANY>&COMPANY16;</COMPANY>
  <PRICE>7.80</PRICE>
  <YEAR>1983</YEAR>
</CD>
<CD id="C0022"
  similarTo="C0010 C0011 C0012 C0023">
```

```
<TITLE>Pavarotti Gala Concert</TITLE>
<ARTIST>Luciano Pavarotti</ARTIST>
<COUNTRY>UK</COUNTRY>
<COMPANY>&COMPANY24;</COMPANY>
<PRICE>9.90</PRICE>
<YEAR>1991</YEAR>
</CD>
<CD id="C0023"
  similarTo="C0010 C0011 C0012 C0022">
  <TITLE>The dock of the bay</TITLE>
  <ARTIST>Otis Redding</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>&COMPANY9;</COMPANY>
  <PRICE>7.90</PRICE>
  <YEAR>1987</YEAR>
</CD>
<CD id="C0024">
  <TITLE>Picture book</TITLE>
  <ARTIST>Simply Red</ARTIST>
  <COUNTRY>EU</COUNTRY>
  <COMPANY>&COMPANY17;</COMPANY>
  <PRICE>7.20</PRICE>
  <YEAR>1985</YEAR>
</CD>
<CD id="C0025">
  <TITLE>Red</TITLE>
  <ARTIST>The Communards</ARTIST>
  <COUNTRY>UK</COUNTRY>
  <COMPANY>&COMPANY18;</COMPANY>
  <PRICE>7.80</PRICE>
  <YEAR>1987</YEAR>
</CD>
<CD id="C0026">
  <TITLE>Unchain my heart</TITLE>
  <ARTIST>Joe Cocker</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>&COMPANY19;</COMPANY>
  <PRICE>8.20</PRICE>
  <YEAR>1987</YEAR>
</CD>
```

```
<CD id="C0027">
  <TITLE>Doo - Wops & Hooligans</TITLE>
  <ARTIST>Bruno Mars</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>&COMPANY20;</COMPANY>
  <PRICE>9.90</PRICE>
  <YEAR>2010</YEAR>
</CD>
<CD id="C0028">
  <TITLE>We Sing, We Dance, We Steal Things </TITLE>
  <ARTIST>Jason Mraz</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>&COMPANY9;</COMPANY>
  <PRICE>8.90</PRICE>
  <YEAR>2008</YEAR>
</CD>
<CD id="C0029">
  <TITLE>Little Voice</TITLE>
  <ARTIST>Sara Bareilles</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>&COMPANY20;</COMPANY>
  <PRICE>7.90</PRICE>
  <YEAR>2007</YEAR>
</CD>
<CD id="C0030">
  <TITLE>Teenage Dream</TITLE>
  <ARTIST>Katy Perry</ARTIST>
  <COUNTRY>USA</COUNTRY>
  <COMPANY>&COMPANY25;</COMPANY>
  <PRICE>13.90</PRICE>
  <YEAR>2012</YEAR>
  <TRACK>Teenage Dream</TRACK>
  <TRACK>Last Friday Night</TRACK>
  <TRACK>California Gurls</TRACK>
  <TRACK>Firework </TRACK>
  <TRACK>Peacock</TRACK>
  <TRACK>Circle The Drain</TRACK>
  <TRACK>The One That Got Away</TRACK>
  <TRACK>E.T.</TRACK>
  <TRACK>Who Am I Living For?</TRACK>
```



```

    <TRACK>Pearl</TRACK>
    <TRACK>Hummingbird Heartbeat</TRACK>
    <TRACK>Not Like The Movies </TRACK>

</CD>
<CD id="C0031">
    <TITLE>Continuum</TITLE>
    <ARTIST>John Mayer</ARTIST>
    <COUNTRY>USA</COUNTRY>
    <COMPANY>&COMPANY21;</COMPANY>
    <PRICE>6.90</PRICE>
    <YEAR>2008</YEAR>
    <TRACK> Waiting On the World To Change </TRACK>
    <TRACK>I Don't Trust Myself (With Loving You) </TRACK>
    <TRACK>Belief </TRACK>
    <TRACK>Gravity</TRACK>
    <TRACK>The Heart of Life</TRACK>
    <TRACK>Vultures</TRACK>
    <TRACK>Stop This Train</TRACK>
    <TRACK>Slow Dancing In a Burning Room</TRACK>
    <TRACK>Bold As Love</TRACK>
    <TRACK>Dreaming With a Broken Heart</TRACK>
    <TRACK>In Repair</TRACK>
    <TRACK>I'm Gonna Find Another You</TRACK>
    <TRACK>Say</TRACK>

</CD>
</CATALOG>

```

- The document() function
- <xsl:copy-of>

```

<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0"
xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
    <xsl:output method="xml" version="1.0" encoding="UTF-8" indent="yes"/>

    <xsl:template match="/">
        <root>

```

```

<xsl:for-each select="document('cdCatalog2.xml')//ARTIST">
  &#032;
  <xsl:copy-of select="."/>

</xsl:for-each>

```

```

</root>
</xsl:template>
</xsl:stylesheet>

```

output:

Bob DylanBonnie TylerDolly PartonGary MooreEros RamazzottiBee GeesDr.HookRod
StewartAndrea BocelliPercy SledgeSavage RoseManyKenny RogersWill SmithVan
MorrisonJorn HoelCat StevensSam BrownT'PauTina TurnerKim LarsenLuciano
PavarottiOtis ReddingSimply RedThe CommunardsJoe CockerBruno MarsJason MrazSara
BareillesKaty PerryJohn Mayer

- <xsl:call-template>
- <xsl:param> element

```

<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

```

```

<xsl:variable name="xx">
  <html>
    <body>
      <xsl:call-template name="show_title">
        <xsl:with-param name="TITLE" />
      </xsl:call-template>
    </body>
  </html>
</xsl:variable>

```

```

<xsl:template name="show_title" match="/">
  <xsl:param name="TITLE" />
  <xsl:for-each select="CATALOG/CD">

    &#032;
    Title: <xsl:value-of select="TITLE" />

```

```

        </xsl:for-each>
    </xsl:template>

</xsl:stylesheet>

```

Output:

```

?xml version="1.0" encoding="utf-8"?> Title: Empire Burlesque Title: Hide your heart Title: Greatest Hits Title:
Still got the blues Title: Eros Title: One night only Title: Sylvias Mother Title: Maggie May Title: Romanza Title:
When a man loves a woman Title: Black angel Title: 1999 Grammy Nominees Title: For the good times Title: Big
Willie style Title: Tupelo Honey Title: Soulsville Title: The very best of Title: Stop Title: Bridge of Spies Title:
Private Dancer Title: Midt om natten Title: Pavarotti Gala Concert Title: The dock of the bay Title: Picture book
Title: Red Title: Unchain my heart Title: Doo - Wops & Hooligans Title: We Sing, We Dance, We Steal Things
Title: Little Voice Title: Teenage Dream Title: Continuum

```

- conditional logic

```

<?xml version="1.0" encoding="ISO-8859-1"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

  <xsl:template match="/">
    <html>
      <body>
        <h2>Catalog</h2>
        <xsl:for-each select="CATALOG/CD">
          <xsl:if test="PRICE>10">
            <xsl:value-of select="TITLE"/>
            &#xA0;
            <xsl:value-of select="ARTIST"/>
            &#xA0;
          </xsl:if>
        </xsl:for-each>
      </body>
    </html>
  </xsl:template>
</xsl:stylesheet>

```

output:

Catalog

Empire Burlesque Bob Dylan Still got the blues Gary Moore One night only Bee Gees Romanza Andrea
 Bocelli Black angel Savage Rose 1999 Grammy Nominees Many Teenage Dream Katy Perry

- <xsl:sort> element

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
  <xsl:template match="/">
    <html>
      <body>
        <h2>CD CATALOG</h2>
        <xsl:for-each select="CATALOG/CD">
          <xsl:sort select="YEAR"/>
          &#xA0;
          <xsl:value-of select="TITLE"/>
          &#xA0;
          <xsl:value-of select="YEAR"/>
        </xsl:for-each>
      </body>
    </html>
  </xsl:template>
</xsl:stylesheet>
```

output:

CD CATALOG

Tupelo Honey 1971 Sylvias Mother 1973 Greatest Hits 1982 Private Dancer 1983 Midt om
natten 1983 Empire Burlesque 1985 Picture book 1985 When a man loves a woman 1987 Bridge of
Spies 1987 The dock of the bay 1987 Red 1987 Unchain my heart 1987 Hide your
heart 1988 Stop 1988 Still got the blues 1990 Maggie May 1990 The very best of 1990 Pavarotti Gala
Concert 1991 Black angel 1995 For the good
times 1995 Romanza 1996 Soulsville 1996 Eros 1997 Big Willie style 1997 One night
only 1998 1999 Grammy Nominees 1999 Little Voice 2007 We Sing, We Dance, We Steal
Things 2008 Continuum 2008 Doo - Wops & Hooligans 2010 Teenage Dream 2012

- <xsl:copy>

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

  <xsl:template match=""/>
```

```

    <xsl:copy>
      <xsl:apply-templates/>
    </xsl:copy>
  </xsl:template>

</xsl:stylesheet>

```

output:

Empire Burlesque Bob Dylan USA Columbia 10.90 1985 Hide your heart Bonnie Tyler UK CBS Records 9.90 1988
 Greatest Hits Dolly Parton USA RCA 9.90 1982 Still got the blues Gary Moore UK Virgin records 10.20 1990 Eros
 Eros Ramazzotti EU BMG 9.90 1997 One night only Bee Gees UK Polydor 10.90 1998 Sylvias Mother Dr.Hook
 UK CBS 8.10 1973 Maggie May Rod Stewart UK Pickwick 8.50 1990 Romanza Andrea Bocelli EU Polydor 10.80
 1996 When a man loves a woman Percy Sledge USA Atlantic 8.70 1987 Black angel Savage Rose EU Mega 10.90
 1995 1999 Grammy Nominees Many USA Grammy 10.20 1999 For the good times Kenny Rogers UK Mucik
 Master 8.70 1995 Big Willie style Will Smith USA Columbia 9.90 1997 Tupelo Honey Van Morrison UK Polydor
 8.20 1971 Soulsville Jorn Hoel Norway WEA 7.90 1996 The very best of Cat Stevens UK Island 8.90 1990 Stop
 Sam Brown UK A and M 8.90 1988 Bridge of Spies T'Pau UK Siren 7.90 1987 Private Dancer Tina Turner UK
 Capitol 8.90 1983 Midt om natten Kim Larsen EU Medley 7.80 1983 Pavarotti Gala Concert Luciano Pavarotti UK
 DECCA 9.90 1991 The dock of the bay Otis Redding USA Atlantic 7.90 1987 Picture book Simply Red EU Elektra
 7.20 1985 Red The Communards UK London 7.80 1987 Unchain my heart Joe Cocker USA EMI 8.20 1987 Doo -
 Wops & Hooligans Bruno Mars USA Epic 9.90 2010 We Sing, We Dance, We Steal Things Jason Mraz USA
 Atlantic 8.90 2008 Little Voice Sara Bareilles USA Epic 7.90 2007 Teenage Dream Katy Perry USA Capitol 13.90
 2012 Teenage Dream Last Friday Night California Gurls Firework Peacock Circle The Drain The One That Got
 Away E.T. Who Am I Living For? Pearl Hummingbird Heartbeat Not Like The Movies Continuum John Mayer
 USA Sony 6.90 2008 Waiting On the World To Change I Don't Trust Myself (With Loving You) Belief Gravity The
 Heart of Life Vultures Stop This Train Slow Dancing In a Burning Room Bold As Love Dreaming With a Broken
 Heart In Repair I'm Gonna Find Another You Say

- <xsl:import>

Importing xslt program:

```

<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="1.0"
">
<xsl:import href="cdcatalog_ex3.xsl"/>
<xsl:template match="/">
<xsl:apply-imports/>
</xsl:template>
</xsl:stylesheet>

```

imported xslt program:

```

<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

```

```

<xsl:template match="''">
  <xsl:copy>
    <xsl:apply-templates/>
  </xsl:copy>
</xsl:template>

</xsl:stylesheet>

```

output:

```

?xml version="1.0" encoding="utf-8"?> Empire Burlesque Bob Dylan USA Columbia 10.90 1985 Hide your heart
Bonnie Tyler UK CBS Records 9.90 1988 Greatest Hits Dolly Parton USA RCA 9.90 1982 Still got the blues Gary
Moore UK Virgin records 10.20 1990 Eros Eros Ramazzotti EU BMG 9.90 1997 One night only Bee Gees UK
Polydor 10.90 1998 Sylvias Mother Dr.Hook UK CBS 8.10 1973 Maggie May Rod Stewart UK Pickwick 8.50 1990
Romanza Andrea Bocelli EU Polydor 10.80 1996 When a man loves a woman Percy Sledge USA Atlantic 8.70
1987 Black angel Savage Rose EU Mega 10.90 1995 1999 Grammy Nominees Many USA Grammy 10.20 1999 For
the good times Kenny Rogers UK Mucik Master 8.70 1995 Big Willie style Will Smith USA Columbia 9.90 1997
Tupelo Honey Van Morrison UK Polydor 8.20 1971 Soulsville Jorn Hoel Norway WEA 7.90 1996 The very best of
Cat Stevens UK Island 8.90 1990 Stop Sam Brown UK A and M 8.90 1988 Bridge of Spies T'Pau UK Siren 7.90
1987 Private Dancer Tina Turner UK Capitol 8.90 1983 Midt om natten Kim Larsen EU Medley 7.80 1983
Pavarotti Gala Concert Luciano Pavarotti UK DECCA 9.90 1991 The dock of the bay Otis Redding USA Atlantic
7.90 1987 Picture book Simply Red EU Elektra 7.20 1985 Red The Communards UK London 7.80 1987 Unchain
my heart Joe Cocker USA EMI 8.20 1987 Doo - Wops & Hooligans Bruno Mars USA Epic 9.90 2010 We Sing, We
Dance, We Steal Things Jason Mraz USA Atlantic 8.90 2008 Little Voice Sara Bareilles USA Epic 7.90 2007
Teenage Dream Katy Perry USA Capitol 13.90 2012 Teenage Dream Last Friday Night California Gurls Firework
Peacock Circle The Drain The One That Got Away E.T. Who Am I Living For? Pearl Hummingbird Heartbeat Not
Like The Movies Continuum John Mayer USA Sony 6.90 2008 Waiting On the World To Change I Don't Trust
Myself (With Loving You) Belief Gravity The Heart of Life Vultures Stop This Train Slow Dancing In a Burning
Room Bold As Love Dreaming With a Broken Heart In Repair I'm Gonna Find Another You Say

```

- <xsl:include>

including xslt program:

```

<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="1.0">
  <xsl:include href="work.xsl"/>
  <xsl:template match="/">
    <xsl:apply-templates/>
  </xsl:template>
</xsl:stylesheet>

```

included xslt program:

```

<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

  <xsl:template match="message">
    <xsl:copy>
      <xsl:apply-templates/>
    </xsl:copy>
  </xsl:template>

```

```
</xsl:copy>
</xsl:template>
```

```
</xsl:stylesheet>
```

output:

```
?xml version="1.0" encoding="utf-8"?>Empire Burlesque Bob Dylan USA Columbia 10.90 1985 Hide your heart
Bonnie Tyler UK CBS Records 9.90 1988 Greatest Hits Dolly Parton USA RCA 9.90 1982 Still got the blues Gary
Moore UK Virgin records 10.20 1990 Eros Eros Ramazzotti EU BMG 9.90 1997 One night only Bee Gees UK
Polydor 10.90 1998 Sylvias Mother Dr.Hook UK CBS 8.10 1973 Maggie May Rod Stewart UK Pickwick 8.50 1990
Romanza Andrea Bocelli EU Polydor 10.80 1996 When a man loves a woman Percy Sledge USA Atlantic 8.70
1987 Black angel Savage Rose EU Mega 10.90 1995 1999 Grammy Nominees Many USA Grammy 10.20 1999 For
the good times Kenny Rogers UK Mucik Master 8.70 1995 Big Willie style Will Smith USA Columbia 9.90 1997
Tupelo Honey Van Morrison UK Polydor 8.20 1971 Soulsville Jorn Hoel Norway WEA 7.90 1996 The very best of
Cat Stevens UK Island 8.90 1990 Stop Sam Brown UK A and M 8.90 1988 Bridge of Spies T'Pau UK Siren 7.90
1987 Private Dancer Tina Turner UK Capitol 8.90 1983 Midt om natten Kim Larsen EU Medley 7.80 1983
Pavarotti Gala Concert Luciano Pavarotti UK DECCA 9.90 1991 The dock of the bay Otis Redding USA Atlantic
7.90 1987 Picture book Simply Red EU Elektra 7.20 1985 Red The Communards UK London 7.80 1987 Unchain
my heart Joe Cocker USA EMI 8.20 1987 Doo - Wops & Hooligans Bruno Mars USA Epic 9.90 2010 We Sing, We
Dance, We Steal Things Jason Mraz USA Atlantic 8.90 2008 Little Voice Sara Bareilles USA Epic 7.90 2007
Teenage Dream Katy Perry USA Capitol 13.90 2012 Teenage Dream Last Friday Night California Gurls Firework
Peacock Circle The Drain The One That Got Away E.T. Who Am I Living For? Pearl Hummingbird Heartbeat Not
Like The Movies Continuum John Mayer USA Sony 6.90 2008 Waiting On the World To Change I Don't Trust
Myself (With Loving You) Belief Gravity The Heart of Life Vultures Stop This Train Slow Dancing In a Burning
Room Bold As Love Dreaming With a Broken Heart In Repair I'm Gonna Find Another You Say
```

- <xsl:template> mode attribute

```
<xsl:stylesheet xmlns:xsl = "http://www.w3.org/1999/XSL/Transform" version = "1.0" >
  <xsl:output method = "xml" indent = "yes" />
```

```
  <xsl:template match = "/" >
    <CATALOG >
      <xsl:apply-templates select = "///ARTIST" />
      <xsl:apply-templates select = "///ARTIST" mode = "xxx" />
      <xsl:apply-templates select = "///ARTIST" mode = "yyy" />
    </CATALOG>
  </xsl:template>
```

```
  <xsl:template match = "ARTIST" >
    <OOO >
      ...
      <xsl:value-of select = "." />
    </OOO>
    &#xA0;
  </xsl:template>
```

```
  <xsl:template match = "ARTIST" mode = "xxx" >
    <XXX >
```

```

        xxx
        <xsl:value-of select = "." />
    </XXX>
    &#xA0;
</xsl:template>

<xsl:template match = "ARTIST" mode = "yyy" >
    <YYY>
        yyy
        <xsl:value-of select = "." />
    </YYY>
    &#xA0;
</xsl:template>
</xsl:stylesheet>

```

output:

```

... Bob Dylan ... Bonnie Tyler ... Dolly Parton ... Gary Moore ... Eros Ramazzotti ... Bee Gees ... Dr.Hook ...
Rod Stewart ... Andrea Bocelli ... Percy Sledge ... Savage Rose ... Many ... Kenny Rogers ... Will Smith ...
Van Morrison ... Jorn Hoel ... Cat Stevens ... Sam Brown ... T'Pau ... Tina Turner ... Kim Larsen ... Luciano
Pavarotti ... Otis Redding ... Simply Red ... The Communards ... Joe Cocker ... Bruno Mars ... Jason Mraz ...
Sara Bareilles ... Katy Perry ... John Mayer xxx Bob Dylan xxx Bonnie Tyler xxx Dolly Parton xxx Gary
Moore xxx Eros Ramazzotti xxx Bee Gees xxx Dr.Hook xxx Rod Stewart xxx Andrea Bocelli xxx Percy
Sledge xxx Savage Rose xxx Many xxx Kenny Rogers xxx Will Smith xxx Van Morrison xxx Jorn
Hoel xxx Cat Stevens xxx Sam Brown xxx T'Pau xxx Tina Turner xxx Kim Larsen xxx Luciano
Pavarotti xxx Otis Redding xxx Simply Red xxx The Communards xxx Joe Cocker xxx Bruno Mars xxx
Jason Mraz xxx Sara Bareilles xxx Katy Perry xxx John Mayer yyy Bob Dylan yyy Bonnie Tyler yyy Dolly
Parton yyy Gary Moore yyy Eros Ramazzotti yyy Bee Gees yyy Dr.Hook yyy Rod Stewart yyy Andrea
Bocelli yyy Percy Sledge yyy Savage Rose yyy Many yyy Kenny Rogers yyy Will Smith yyy Van
Morrison yyy Jorn Hoel yyy Cat Stevens yyy Sam Brown yyy T'Pau yyy Tina Turner yyy Kim Larsen yyy
Luciano Pavarotti yyy Otis Redding yyy Simply Red yyy The Communards yyy Joe Cocker yyy Bruno
Mars yyy Jason Mraz yyy Sara Bareilles yyy Katy Perry yyy John Mayer

```

- Grouping in XSLT 2.0

```

<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
    version="2.0">

    <xsl:output method="text"/>

    <xsl:template match="CATALOG">

        <xsl:for-each-group select="CD" group-by="COMPANY">
            <xsl:value-of select="current-grouping-key()"/>
            <xsl:text>
</xsl:text>

```



```
</xsl:for-each-group>
```

```
</xsl:template>
```

```
</xsl:stylesheet>
```

OUTPUT:

Columbia
CBS Records
RCA
Virgin records
BMG
Polydor
CBS
Pickwick
Atlantic
Mega
Grammy
Mucik Master
WEA
Island
A and M
Siren
Capitol
Medley
DECCA
Elektra
London
EMI
Epic
Sony