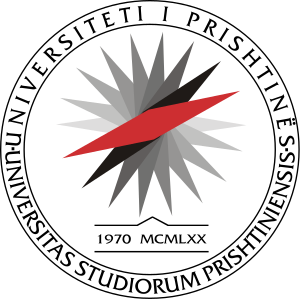
**UNIVERSITETI I PRISHTINËS**

**Fakulteti i Inxhinierisë Elektrike dhe Kompjuterike**



**Lënda: Modelet e të dhënave dhe gjuhët e pyetësorëve**

**Faza e dytë e projektit**

|  |  |  |  |
| --- | --- | --- | --- |
| **Studentët:** | Fatbardh Gashi | **Prof:** | Dr.Sc Zenun Kastrati |
|  | Fatbardh Kadriu |  |  |

**Prishtinë, 2020**

1.Të krijohet një XML dokument që përmban më së paku të dhënat e katër tabelave që keni

krijuar në Oracle.

<?xml version="1.0" encoding="UTF-8"?>  
<!DOCTYPE InstitutiHidrometeorogjik SYSTEM "DTDSkema.dtd">

<InstitutiHidrometeorogjik>  
 <!-- Të dhënat nga tabela StacionetMeteorologjike në databazën XML -->  
 <StacionetMeteorologjike id="1">  
 <EmriStacionit>Brezovicë</EmriStacionit>  
 <Kordinatat>  
 <Gjeresia\_Gjeografike>42.22169</Gjeresia\_Gjeografike>  
 <Gjatesia\_Gjeografike>21.00166</Gjatesia\_Gjeografike>  
 </Kordinatat>  
 <LartesiaMbidetare>915</LartesiaMbidetare>  
 <PellguLumor>Lepenc</PellguLumor>   
 </StacionetMeteorologjike>  
   
 <StacionetMeteorologjike id="2">  
 <EmriStacionit>Dragash</EmriStacionit>  
 <Kordinatat>  
 <Gjeresia\_Gjeografike>42.06236</Gjeresia\_Gjeografike>  
 <Gjatesia\_Gjeografike>20.64678</Gjatesia\_Gjeografike>  
 </Kordinatat>  
 <LartesiaMbidetare>1060</LartesiaMbidetare>  
 <PellguLumor>Plavë</PellguLumor>   
 </StacionetMeteorologjike>  
   
 <!-- Të dhënat nga tabela TeDhenatKlimatologjike në databazën XML -->  
 <TeDhenatKlimatologjike>  
 <Kid>101</Kid>  
 <StacioniID>1</StacioniID>  
 <KMatje data="15-DEC-2019">  
 <Koha>07:00:00 AM</Koha>  
 <Temperatura>-8.2</Temperatura>  
 <Shtypja\_Ajrit>945.4</Shtypja\_Ajrit>  
 <Lageshtia\_Ajrit>88</Lageshtia\_Ajrit>  
 <Reshje\_Shiu>0</Reshje\_Shiu>  
 <Reshje\_Bore>7</Reshje\_Bore>  
 </KMatje>  
 <KMatje data="15-DEC-2019">  
 <Koha>2:00:00 PM</Koha>  
 <Temperatura>-5.1</Temperatura>  
 <Shtypja\_Ajrit>941.1</Shtypja\_Ajrit>  
 <Lageshtia\_Ajrit>85</Lageshtia\_Ajrit>  
 <Reshje\_Shiu>0</Reshje\_Shiu>  
 <Reshje\_Bore>4</Reshje\_Bore>  
 </KMatje>  
 <Insolacioni>3</Insolacioni>  
 <Vranesirat>8</Vranesirat>  
 </TeDhenatKlimatologjike>  
   
 <TeDhenatKlimatologjike>  
 <Kid>102</Kid>  
 <StacioniID>2</StacioniID>  
 <KMatje data="12-DEC-2019">  
 <Koha>07:00:00 AM</Koha>  
 <Temperatura>-7.2</Temperatura>  
 <Shtypja\_Ajrit>888.4</Shtypja\_Ajrit>  
 <Lageshtia\_Ajrit>78</Lageshtia\_Ajrit>  
 <Reshje\_Shiu>0</Reshje\_Shiu>  
 <Reshje\_Bore>2</Reshje\_Bore>  
 </KMatje>  
 <KMatje data="12-DEC-2019">  
 <Koha>02:00:00 PM</Koha>  
 <Temperatura>-5.1</Temperatura>  
 <Shtypja\_Ajrit>941.1</Shtypja\_Ajrit>  
 <Lageshtia\_Ajrit>85</Lageshtia\_Ajrit>  
 <Reshje\_Shiu>0</Reshje\_Shiu>  
 <Reshje\_Bore>4</Reshje\_Bore>  
 </KMatje>  
 <Insolacioni>7</Insolacioni>  
 <Vranesirat>4</Vranesirat>  
 </TeDhenatKlimatologjike>  
   
 <!-- Të dhënat nga tabela Temperatura\_Tokes në databazën XML -->  
 <TemperaturaTokes>  
 <TempID>1</TempID>  
 <StacionId>1</StacionId>  
 <Temperaturat>  
 <Data-Koha>15-DEC-2019 07:00:00 AM</Data-Koha>  
 <Temperatura\_Tokes>2.2</Temperatura\_Tokes>  
 <Thellesia\_Tokes>5</Thellesia\_Tokes>  
 </Temperaturat>  
 <Temperaturat>  
 <Data-Koha>15-DEC-2019 02:00:00 PM</Data-Koha>  
 <Temperatura\_Tokes>2.9</Temperatura\_Tokes>  
 <Thellesia\_Tokes>10</Thellesia\_Tokes>  
 </Temperaturat>  
 </TemperaturaTokes>  
   
   
 <TemperaturaTokes>  
 <TempID>2</TempID>  
 <StacionId>2</StacionId>  
 <Temperaturat>  
 <Data-Koha>15-DEC-2019 07:00:00 AM</Data-Koha>  
 <Temperatura\_Tokes>3.9</Temperatura\_Tokes>  
 <Thellesia\_Tokes>5</Thellesia\_Tokes>  
 </Temperaturat>  
 <Temperaturat>  
 <Data-Koha>15-DEC-2019 02:00:00 PM</Data-Koha>  
 <Temperatura\_Tokes>7.9</Temperatura\_Tokes>  
 <Thellesia\_Tokes>100</Thellesia\_Tokes>  
 </Temperaturat>  
 </TemperaturaTokes>  
   
 <!-- Të dhënat nga tabela Stacionet\_Hidrometrike në databazën XML -->  
 <StacionetHidrometrike id="124">  
 <Pellgu-Lumor>Drini i Bardhë</Pellgu-Lumor>  
 <Emri-Stacionit>Grykë</Emri-Stacionit>  
 <Lumi>Bistrica e Pejës</Lumi>  
 <Kordinatat>  
 <Gjeresia\_Gjeografike>42.66175</Gjeresia\_Gjeografike>  
 <Gjatesia\_Gjeografike>20.25122</Gjatesia\_Gjeografike>  
 </Kordinatat>  
 <Lartesia\_Mbidetare>581</Lartesia\_Mbidetare>  
 </StacionetHidrometrike>  
   
 <StacionetHidrometrike id="126">  
 <Pellgu-Lumor>Drini i Bardhë</Pellgu-Lumor>  
 <Emri-Stacionit>Gjakovë</Emri-Stacionit>  
 <Lumi>Ereniku</Lumi>  
 <Kordinatat>  
 <Gjeresia\_Gjeografike>42.36954</Gjeresia\_Gjeografike>  
 <Gjatesia\_Gjeografike>20.42086</Gjatesia\_Gjeografike>  
 </Kordinatat>  
 <Lartesia\_Mbidetare>341</Lartesia\_Mbidetare>  
 </StacionetHidrometrike>  
   
 <!-- Të dhënat nga tabela Stacionet\_Hidrometrike në databazën XML -->  
 <TeDhenatHidrometrike id="15">  
 <HidroStacioniID>1</HidroStacioniID>  
 <DistancaNgaGryka>29.4</DistancaNgaGryka>  
 <SiperfaqjaUjembledhese>114</SiperfaqjaUjembledhese>  
 <HMatjet>  
 <DataKoha>15-DEC-2019 12:00:00 AM</DataKoha>  
 <NiveliUjit>48</NiveliUjit>  
 <PrurjaUjit>0.6</PrurjaUjit>  
 </HMatjet>  
 <HMatjet>  
 <DataKoha>15-DEC-2019 5:00:00 PM</DataKoha>  
 <NiveliUjit>44</NiveliUjit>  
 <PrurjaUjit>1.2</PrurjaUjit>  
 </HMatjet>  
 </TeDhenatHidrometrike>  
 <TeDhenatHidrometrike id="16">  
 <HidroStacioniID>2</HidroStacioniID>  
 <DistancaNgaGryka>29.4</DistancaNgaGryka>  
 <SiperfaqjaUjembledhese>114</SiperfaqjaUjembledhese>  
 <HMatjet>  
 <DataKoha>15-DEC-2019 12:00:00 AM</DataKoha>  
 <NiveliUjit>47</NiveliUjit>  
 <PrurjaUjit>0.6</PrurjaUjit>  
 </HMatjet>  
 <HMatjet>  
 <DataKoha>15-DEC-2019 5:00:00 PM</DataKoha>  
 <NiveliUjit>41</NiveliUjit>  
 <PrurjaUjit>2.2</PrurjaUjit>  
 </HMatjet>  
 </TeDhenatHidrometrike>  
   
 <Zhurma id="1">  
 <Data\_Koha>17-DEC-2019 07:00:00 AM</Data\_Koha>  
 <TipiPranuesit>Vendbanime Rurale</TipiPranuesit>  
 <VleraZhurmes>30</VleraZhurmes>  
 </Zhurma>  
 <Zhurma id="2">  
 <Data\_Koha>17-DEC-2019 08:00:00 AM</Data\_Koha>  
 <TipiPranuesit>Vendbanime Urbane</TipiPranuesit>  
 <VleraZhurmes>40</VleraZhurmes>  
 </Zhurma>  
 <Zhurma id="3">  
 <Data\_Koha>17-DEC-2019 09:00:00 AM</Data\_Koha>  
 <TipiPranuesit>Vendbanime Industriale</TipiPranuesit>  
 <VleraZhurmes>50</VleraZhurmes>  
 </Zhurma>  
   
</InstitutiHidrometeorogjik>

2. Për XML dokumentin e krijuar nga pika e parë, të shkruhet një DTD dokument për validimin

e tij.

<?xml version="1.0" encoding="UTF-8"?>  
<!ELEMENT InstitutiHidrometeorogjik (StacionetMeteorologjike+, TeDhenatKlimatologjike+,   
 TemperaturaTokes+, StacionetHidrometrike+, TeDhenatHidrometrike+, Zhurma+)>  
   
<!ELEMENT StacionetMeteorologjike ((EmriStacionit, Kordinatat, LartesiaMbidetare, PellguLumor))+>   
<!ATTLIST StacionetMeteorologjike   
 id CDATA #REQUIRED>  
<!ELEMENT EmriStacionit (#PCDATA)\*>  
<!ELEMENT Kordinatat (Gjeresia\_Gjeografike, Gjatesia\_Gjeografike)\*>  
<!ELEMENT Gjeresia\_Gjeografike (#PCDATA)\*>  
<!ELEMENT Gjatesia\_Gjeografike (#PCDATA)\*>  
<!ELEMENT LartesiaMbidetare (#PCDATA)\*>  
<!ELEMENT PellguLumor (#PCDATA)\*>  
  
<!ELEMENT TeDhenatKlimatologjike (Kid, StacioniID, KMatje+, Insolacioni, Vranesirat)>  
<!ELEMENT Kid (#PCDATA)>  
<!ELEMENT StacioniID (#PCDATA)>  
<!ELEMENT KMatje (Koha, Temperatura, Shtypja\_Ajrit, Lageshtia\_Ajrit, Reshje\_Shiu, Reshje\_Bore)+>  
<!ATTLIST KMatje   
 data CDATA #REQUIRED>  
<!ELEMENT Koha (#PCDATA)>  
<!ELEMENT Temperatura (#PCDATA)>  
<!ELEMENT Shtypja\_Ajrit (#PCDATA)>  
<!ELEMENT Lageshtia\_Ajrit (#PCDATA)>  
<!ELEMENT Reshje\_Shiu (#PCDATA)>  
<!ELEMENT Reshje\_Bore (#PCDATA)>  
<!ELEMENT Insolacioni (#PCDATA)>  
<!ELEMENT Vranesirat (#PCDATA)>  
  
<!ELEMENT TemperaturaTokes (TempID, StacionId, Temperaturat\*)>  
<!ELEMENT Temperaturat (Data-Koha, Temperatura\_Tokes, Thellesia\_Tokes)\*>  
<!ELEMENT StacionId (#PCDATA)>  
<!ELEMENT TempID (#PCDATA)>  
<!ELEMENT Data-Koha (#PCDATA)\*>  
<!ELEMENT Temperatura\_Tokes (#PCDATA)>  
<!ELEMENT Thellesia\_Tokes (#PCDATA) >  
  
  
<!ELEMENT StacionetHidrometrike (Pellgu-Lumor, Emri-Stacionit, Lumi, Kordinatat, Lartesia\_Mbidetare)>  
<!ELEMENT Pellgu-Lumor (#PCDATA) >  
<!ELEMENT Emri-Stacionit (#PCDATA) >  
<!ELEMENT Lumi (#PCDATA) >  
<!ELEMENT Lartesia\_Mbidetare (#PCDATA) >  
<!ATTLIST StacionetHidrometrike   
 id CDATA #REQUIRED>  
  
<!ELEMENT TeDhenatHidrometrike (HidroStacioniID, DistancaNgaGryka, SiperfaqjaUjembledhese, HMatjet+) >  
<!ELEMENT HidroStacioniID (#PCDATA) >  
<!ELEMENT DistancaNgaGryka (#PCDATA) >  
<!ELEMENT SiperfaqjaUjembledhese (#PCDATA) >  
<!ELEMENT HMatjet (DataKoha, NiveliUjit, PrurjaUjit) >  
<!ELEMENT DataKoha (#PCDATA) >  
<!ELEMENT NiveliUjit (#PCDATA) >  
<!ELEMENT PrurjaUjit (#PCDATA) >  
<!ATTLIST TeDhenatHidrometrike   
 id CDATA #REQUIRED>  
   
<!ELEMENT Zhurma (Data\_Koha, TipiPranuesit, VleraZhurmes) >  
<!ELEMENT Data\_Koha (#PCDATA) >  
<!ELEMENT TipiPranuesit (#PCDATA) >  
<!ELEMENT VleraZhurmes (#PCDATA) >  
<!ATTLIST Zhurma  
 id CDATA #REQUIRED>

3. Për XML dokumentin e krijuar nga pika e parë, të shkruhen më së paku pesë XPath query.

1. Sa jane koordinatat gjeografike te stacionit meteorologjik “Brezovicë”.

/InstitutiHidrometeorogjik/StacionetMeteorologjike[EmriStacionit='Brezovicë']/Kordinatat

1. Te gjendet vlera maksimale e reshjeve te bores(cm) ne mes ores ‘01:00:00 AM**'** dhe‘07:00:00 AM’ te dates 12 DEC 2019.

max(/InstitutiHidrometeorogjik/TeDhenatKlimatologjike/KMatje[@data='12-DEC-2019'][Koha >= '01:00:00 AM' and Koha <='07:00:00 AM']/Reshje\_Bore)

1. Te gjendet temperatura mesatare kur ka reshje lokale bore.

avg(/InstitutiHidrometeorogjik/TeDhenatKlimatologjike/KMatje[Reshje\_Bore > 0]/Temperatura)

1. Te gjendet numri i lumenjve qe derdhen ne pellgun “Drini i bardhe”.

count(/InstitutiHidrometeorogjik/StacionetHidrometrike[Pellgu-Lumor = "Drini i Bardhë"]/Lumi)

1. Te cili tip i pranuesit degjohet zhurme me e madhe

/InstitutiHidrometeorogjik/Zhurma[VleraZhurmes = max(/InstitutiHidrometeorogjik/Zhurma/VleraZhurmes)]/TipiPranuesit

1. Ne qfare thellesia te tokes temperatura eshte me e vogel.

/InstitutiHidrometeorogjik/TemperaturaTokes/Temperaturat[Temperatura\_Tokes = min(/InstitutiHidrometeorogjik/TemperaturaTokes/Temperaturat/Temperatura\_Tokes)]/Thellesia\_Tokes

1. Te tregohet se qfare moti ka qene me daten 12 dhjetore 2019.

if(boolean(/InstitutiHidrometeorogjik/TeDhenatKlimatologjike[@data="12-DEC-2019"][Insolacioni>10])) then "Mot me diell" else "Mot i vranet"

4. Për XML dokumentin e krijuar nga pika e parë, të shkruhen më së paku pesë Xquery.

1. Shfaqni të gjitha Stacionet Meteorologjike (emrin e tyre) të cilat kanë lartësinë mbidetare më të vogël se 1000.

**for** **$x** **in** *doc*("Tabelat\_XML.xml")/**InstitutiHidrometeorogjik**/**StacionetMeteorologjike**  
**where** **$x**/**LartesiaMbidetare**<1000  
**return** **$x**/**EmriStacionit**

1. Shfaqni të gjithë lumenjtë (emrin e tyre) dhe numrin përkatës rendor të tyre si id.

**for** **$lumi** **at** **$nr** **in** *doc*("Tabelat\_XML.xml ")/**InstitutiHidrometeorogjik**/**StacionetHidrometrike**/**Lumi**  
**return** <lumi **id**=**"**{**$nr**}**"**> {*data*(**$lumi**)}</lumi>

1. Listoni stacionet hidrometrike dhe distancen e tyre nga gryka duke I renditur sipas distances

**for** **$x** **in** *doc*("Tabelat\_XML.xml")/**InstitutiHidrometeorogjik**/**TeDhenatHidrometrike**  
**order by** **$x**/**DistancaNgaGryka**  
**return** <StacionetHidrometrike>{**$x**/**HidroStacioniID**, **$x**/**DistancaNgaGryka** }</StacionetHidrometrike>

1. Shfaqni te gjithe tipet e pranuesve qe kane vleren e zhurmes me te madhe se 10

**for** **$x** **in** *doc*("Tabelat\_XML.xml")/**InstitutiHidrometeorogjik**/**Zhurma**  
**return** **if**(**$x**/**VleraZhurmes** > 10) **then** **$x**/**TipiPranuesit**  
**else** ()

1. Cfare temperatura ka qene me daten 12-DEC-2019 ne oren 02:00:00 PM

**for** **$x** **in** *doc*("Tabelat\_XML.xml")/**InstitutiHidrometeorogjik**/**TeDhenatKlimatologjike**/**KMatje**  
**where** **$x**/***@data***="12-DEC-2019" and **$x**/**Koha**="02:00:00 PM"  
**return** **$x**/**Temperatura**

5. Të shkruhet një XSLT dokument që do ta transformojë XML dokumentin nga pika e parë në

një tabelë HTML.

<?xml version="1.0" encoding="UTF-8"?>  
<xsl:stylesheet version="1.0"  
    xmlns:xsl="http://www.w3.org/1999/XSL/Transform">  
    <xsl:template match="/">  
        <html>  
            <head>  
                <style>  
                    body {  
                    background-color: bisque;  
                    }  
                    table tr th {  
                    padding: 15px;  
                    }  
                    table {  
                    border-collapse: collapse;  
                    }  
                    tr,  
                    th,  
                    td {  
                    border: 1px solid rgb(15, 127, 196);  
                    padding: 4px;  
                    }  
                    tr:hover{  
                    background-color: #f5f5f5;  
                    }  
                </style>  
            </head>  
            <body>  
                <h2>Stacionet Meteorologjike</h2>  
                <table border="1">  
                    <xsl:for-each select="InstitutiHidrometeorogjik/StacionetMeteorologjike">  
                        <tr style="background-color:#A12424; color:white;">  
                            <th>Emri Stacionit</th>  
                            <th>Kordinatat</th>  
                            <th>Lartesia Mbidetare</th>  
                            <th>Pellgu Lumor</th>  
                        </tr>  
                        <tr>  
                            <td><xsl:value-of select="EmriStacionit"/></td>  
                            <td><table border="1">  
                                <tr><th>Gjeresia</th><th>Gjatesia</th></tr>  
                                <tr>  
                                    <td><xsl:value-of select="Kordinatat/Gjeresia\_Gjeografike"/></td>  
                                    <td><xsl:value-of select="Kordinatat/Gjatesia\_Gjeografike"/></td>  
                                </tr>  
                            </table></td>  
                            <td><xsl:value-of select="LartesiaMbidetare"/></td>  
                            <td><xsl:value-of select="PellguLumor"/></td>  
                        </tr>  
                    </xsl:for-each>  
                </table>  
                  
                  
                <h2>Te dhenat Klimatologjike</h2>  
                <table border="1">  
                    <tr style="background-color:#A12424; color:white;">  
                        <th>StacioniID</th>  
                        <th>Matjet</th>  
                        <th>Insolacioni</th>  
                        <th>Vranesirat</th>  
                    </tr>  
                    <xsl:for-each select="InstitutiHidrometeorogjik/TeDhenatKlimatologjike">  
                        <tr>  
                            <td><xsl:value-of select="StacioniID" /></td>  
                            <td>  
                                <table border="1">  
                                    <tr>  
                                        <th>Data</th>  
                                        <th>Koha</th>  
                                        <th>Temperatura</th>  
                                        <th>Shtypja e ajrit</th>  
                                        <th>Lageshtia e ajrit</th>  
                                        <th>Reshje shiu</th>  
                                        <th>Reshje bore</th></tr>  
                                      
                                    <xsl:for-each select="KMatje">  
                                        <tr>  
                                            <td><xsl:value-of select="@data" /></td>  
                                            <td><xsl:value-of select="Koha" /></td>  
                                            <td><xsl:value-of select="Temperatura" /></td>  
                                            <td><xsl:value-of select="Shtypja\_Ajrit" /></td>  
                                            <td><xsl:value-of select="Lageshtia\_Ajrit" /></td>  
                                            <td><xsl:value-of select="Reshje\_Shiu" /></td>  
                                            <td><xsl:value-of select="Reshje\_Bore" /></td>  
                                        </tr>  
                                    </xsl:for-each>  
                                </table>  
                            </td>  
                            <td><xsl:value-of select="Insolacioni" /></td>  
                            <td><xsl:value-of select="Vranesirat" /></td>  
                        </tr>  
                    </xsl:for-each>  
                </table>  
                  
                <h2>Temperatura e Tokes</h2>  
                <table border="1">  
                    <tr style="background-color:#A12424; color:white;">  
                        <th>Temperatura ID</th>  
                        <th>Stacioni ID</th>  
                        <th>Temperatura</th>  
                    </tr>  
                    <xsl:for-each select="InstitutiHidrometeorogjik/TemperaturaTokes">  
                        <tr>  
                            <td><xsl:value-of select="TempID" /></td>  
                            <td><xsl:value-of select="StacionId" /></td>  
                            <td>  
                                  
                                <table border="1">  
                                    <tr>  
                                        <th>Data dhe koha</th>  
                                        <th>Temperatura e Tokes</th>  
                                        <th>Thellesia e Tokes</th>  
                                    </tr>  
                                    <xsl:for-each select="Temperaturat">  
                                        <tr>  
                                            <td><xsl:value-of select="Data-Koha" /></td>  
                                            <td><xsl:value-of select="Temperatura\_Tokes" /></td>  
                                            <td><xsl:value-of select="Thellesia\_Tokes" /></td>  
                                        </tr>  
                                    </xsl:for-each>  
                                </table>  
                            </td>  
                        </tr>  
                    </xsl:for-each>  
                </table>  
                  
                  
                <h2>Stacionet Hidrometrike</h2>  
                <table border="1">  
                    <tr style="background-color:#A12424; color:white;">  
                        <th>Stacioni ID</th>  
                        <th>Emri i Stacionit</th>  
                        <th>Pellgu Lumor</th>  
                        <th>Lumi</th>  
                        <th>Kordinatat</th>  
                        <th>Lartesia Mbidetare</th>  
                    </tr>  
                      
                    <xsl:for-each select="InstitutiHidrometeorogjik/StacionetHidrometrike ">  
                        <tr>  
                            <td><xsl:value-of select="@id" /></td>  
                            <td><xsl:value-of select="Emri-Stacionit" /></td>  
                            <td><xsl:value-of select="Pellgu-Lumor" /></td>  
                            <td><xsl:value-of select="Lumi" /></td>  
                            <td>  
                                <table border="1">  
                                    <tr><th>Gjeresia gjeografike</th>  
                                        <th>Gjatesia gjeografike</th></tr>  
                                    <tr>   
                                        <td><xsl:value-of select="Kordinatat/Gjeresia\_Gjeografike" /></td>  
                                        <td><xsl:value-of select="Kordinatat/Gjatesia\_Gjeografike" /></td>  
                                    </tr>  
                                </table>  
                            </td>  
                            <td><xsl:value-of select="Lartesia\_Mbidetare" /></td>         
                        </tr>  
                    </xsl:for-each>  
                </table>  
                  
                  
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                <table border="1">  
                    <tr style="background-color:#A12424; color:white;">  
                        <th>Matja ID</th>  
                        <th>HidroStacioni ID</th>  
                        <th>Distanca nga gryka</th>  
                        <th>Siperfaqja ujembledhese</th>  
                        <th>Matjet</th>  
                    </tr>  
                    <xsl:for-each select="InstitutiHidrometeorogjik/TeDhenatHidrometrike">  
                        <tr>  
                            <td><xsl:value-of select="@id" /></td>  
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                            <td><xsl:value-of select="DistancaNgaGryka" /></td>  
                            <td><xsl:value-of select="SiperfaqjaUjembledhese" /></td>  
                            <td>  
                                <table border="1">  
                                    <tr>  
                                        <th>Data dhe koha</th>  
                                        <th>Niveli i ujit</th>  
                                        <th>Prurja e ujit</th></tr>  
                                      
                                    <xsl:for-each select="HMatjet">  
                                        <tr>  
                                            <td><xsl:value-of select="DataKoha" /></td>  
                                            <td><xsl:value-of select="NiveliUjit" /></td>  
                                            <td><xsl:value-of select="PrurjaUjit" /></td>  
                                        </tr>  
                                    </xsl:for-each>  
                                </table>  
                            </td>  
                        </tr>  
                    </xsl:for-each>  
                </table>  
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                        <th>Zhurma ID</th>  
                        <th>Data dhe koha</th>  
                        <th>Tipi i pranuesit</th>  
                        <th>Vlera e zhurmes</th>  
                    </tr>  
                    <xsl:for-each select="InstitutiHidrometeorogjik/Zhurma ">  
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                            <td><xsl:value-of select="Data\_Koha" /></td>  
                            <td><xsl:value-of select="TipiPranuesit" /></td>  
                            <td><xsl:value-of select="VleraZhurmes" /></td>   
                        </tr>  
                    </xsl:for-each>  
                </table>  
            </body>  
        </html>  
    </xsl:template>  
</xsl:stylesheet>

6. Të shkruhet një XSLT dokument që do ta transformojë XML dokumentin nga pika e parë në

një XML dokument tjetër.

<?xml version="1.0" encoding="UTF-8"?>  
  
<xsl:stylesheet version = "1.0"  
    xmlns:xsl = "http://www.w3.org/1999/XSL/Transform">  
    <xsl:template match = "InstitutiHidrometeorogjik">  
        <InstitutiHidrometeorogjik>  
            <xsl:apply-templates/>  
        </InstitutiHidrometeorogjik>  
    </xsl:template>  
      
    <!-- Fillimi i tabeles StacionetMeteorologjike -->  
    <xsl:template match = "StacionetMeteorologjike">  
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            <xsl:element name = "StacioniID">  
                <xsl:value-of select = "@id"/>  
            </xsl:element>  
            <xsl:element name = "EmriStacionit">  
                <xsl:value-of select = "EmriStacionit"/>  
            </xsl:element>  
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                    <xsl:value-of select="Kordinatat/Gjatesia\_Gjeografike" />  
                </xsl:attribute>  
                <xsl:attribute name="Gjeresia">  
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            </xsl:element>  
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            </xsl:element>  
            <xsl:element name = "PellguLumor">  
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            </xsl:element>  
        </StacionetMeteorologjike>  
    </xsl:template>  
      
    <!-- Fundi i tabeles StacionetMeteorologjike -->  
      
      
    <!--Fillimi i tabeles TeDhenatKlimatologjike -->  
    <xsl:template match = "TeDhenatKlimatologjike">  
        <TeDhenatKlimatologjike>  
            <xsl:attribute name="Kid">  
                <xsl:value-of select="Kid" />  
            </xsl:attribute>  
            <xsl:element name = "StacioniID">  
                <xsl:value-of select = "StacioniID"/>  
            </xsl:element>  
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                    <xsl:attribute name="dataKoha">  
                        <xsl:value-of select="concat(@data,' ', Koha )" />  
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                        <xsl:value-of select="Temperatura" />  
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                    </xsl:attribute>  
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                    <xsl:attribute name="reshjeBore">  
                        <xsl:value-of select="Reshje\_Bore" />  
                    </xsl:attribute>  
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            </xsl:for-each>  
            <xsl:element name = "Insolacioni">  
                <xsl:value-of select = "Insolacioni"/>  
            </xsl:element>  
            <xsl:element name = "Vranesirat">  
                <xsl:value-of select = "Vranesirat"/>  
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        </TeDhenatKlimatologjike>  
    </xsl:template>  
      
    <!--Fundi i tabeles TeDhenatKlimatologjike -->  
      
      
      
    <!--Fillimi i tabeles TemperaturaTokes -->  
      
    <xsl:template match = "TemperaturaTokes">  
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            </xsl:element>  
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                        <xsl:value-of select="Temperatura\_Tokes" />  
                    </xsl:attribute>  
                    <xsl:attribute name="thellesiaTokes">  
                        <xsl:value-of select="Thellesia\_Tokes" />  
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                </xsl:element>  
            </xsl:for-each>  
        </TemperaturaTokes>  
    </xsl:template>  
      
    <!--Fundi i tabeles TemperaturaTokes -->  
      
      
    <!--Fillimi i tabeles StacionetHidrometrike-->  
    <xsl:template match = "StacionetHidrometrike">  
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            </xsl:element>  
            <xsl:element name = "PellguLumor">  
                <xsl:value-of select = "Pellgu-Lumor"/>  
            </xsl:element>  
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            <xsl:value-of select = "Lumi"/>  
            </xsl:element>  
                <xsl:element name = "Kordinatat">  
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                </xsl:element>  
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                <xsl:value-of select = "Lartesia\_Mbidetare"/>  
            </xsl:element>  
        </StacionetHidrometrike>  
    </xsl:template>  
      
    <!--Fundi i tabeles StacionetHidrometrike -->  
      
      
    <!--Fillimi i tabeles TeDhenatHidrometrike -->  
      
    <xsl:template match = "TeDhenatHidrometrike">  
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                <xsl:value-of select = "HidroStacioniID"/>  
            </xsl:element>  
            <xsl:element name = "DistancaNgaGryka">  
                <xsl:value-of select = "DistancaNgaGryka"/>  
            </xsl:element>  
            <xsl:element name = "SiperfaqjaUjembledhese">  
                <xsl:value-of select = "SiperfaqjaUjembledhese"/>  
            </xsl:element>  
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                        <xsl:value-of select="DataKoha" />  
                    </xsl:attribute>  
                    <xsl:attribute name="niveliUjit">  
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            </xsl:for-each>  
        </TeDhenatHidrometrike>  
    </xsl:template>  
      
    <!--Fundi i tabeles TeDhenatHidrometrike -->  
      
    <!--Fillimi i tabeles Zhurma -->  
      
    <xsl:template match = "Zhurma">  
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            </xsl:element>  
            <xsl:element name = "DataKoha">  
                <xsl:value-of select = "Data\_Koha"/>  
            </xsl:element>  
            <xsl:element name = "TipiPranuesit">  
                <xsl:value-of select = "TipiPranuesit"/>  
            </xsl:element>  
            <xsl:element name = "VleraZhurmes">  
                <xsl:value-of select = "VleraZhurmes"/>  
            </xsl:element>  
              
        </Zhurma>  
    </xsl:template>  
      
    <!--Fundi i tabeles Zhurma-->  
</xsl:stylesheet>

XML Dokumenti i transformuar:

<?xml version="1.0" encoding="UTF-8"?>  
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    <StacionetMeteorologjike>  
        <StacioniID>1</StacioniID>  
        <EmriStacionit>Brezovicë</EmriStacionit>  
        <Kordinatat Gjatesia="21.00166" Gjeresia="42.22169"/>  
        <LartesiaMbidetare>915</LartesiaMbidetare>  
        <PellguLumor>Lepenc</PellguLumor>  
    </StacionetMeteorologjike>  
  
    <StacionetMeteorologjike>  
        <StacioniID>2</StacioniID>  
        <EmriStacionit>Dragash</EmriStacionit>  
        <Kordinatat Gjatesia="20.64678" Gjeresia="42.06236"/>  
        <LartesiaMbidetare>1060</LartesiaMbidetare>  
        <PellguLumor>Plavë</PellguLumor>  
    </StacionetMeteorologjike>  
  
  
    <TeDhenatKlimatologjike Kid="101">  
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        <Insolacioni>3</Insolacioni>  
        <Vranesirat>8</Vranesirat>  
    </TeDhenatKlimatologjike>  
  
    <TeDhenatKlimatologjike Kid="102">  
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        <KMatje dataKoha="12-DEC-2019 02:00:00 PM" temperatura="-5.1" shtypjaAjrit="941.1" lageshtiaAjrit="85" reshjeShiu="0" reshjeBore="4"/>  
        <Insolacioni>7</Insolacioni>  
        <Vranesirat>4</Vranesirat>  
    </TeDhenatKlimatologjike>  
  
  
    <TemperaturaTokes tempID="1">  
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    <TemperaturaTokes tempID="2">  
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        <hidroStacioniID>124</hidroStacioniID>  
        <EmriStacionit>Grykë</EmriStacionit>  
        <PellguLumor>Drini i Bardhë</PellguLumor>  
        <Lumi>Bistrica e Pejës</Lumi>  
        <Kordinatat Gjatesia="20.25122" Gjeresia="42.66175"/>  
        <LartesiaMbidetare>581</LartesiaMbidetare>  
    </StacionetHidrometrike>  
  
    <StacionetHidrometrike>  
        <hidroStacioniID>126</hidroStacioniID>  
        <EmriStacionit>Gjakovë</EmriStacionit>  
        <PellguLumor>Drini i Bardhë</PellguLumor>  
        <Lumi>Ereniku</Lumi>  
        <Kordinatat Gjatesia="20.42086" Gjeresia="42.36954"/>  
        <LartesiaMbidetare>341</LartesiaMbidetare>  
    </StacionetHidrometrike>  
  
  
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        <DistancaNgaGryka>29.4</DistancaNgaGryka>  
        <SiperfaqjaUjembledhese>114</SiperfaqjaUjembledhese>  
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    </TeDhenatHidrometrike>  
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        <DistancaNgaGryka>29.4</DistancaNgaGryka>  
        <SiperfaqjaUjembledhese>114</SiperfaqjaUjembledhese>  
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        <VleraZhurmes>30</VleraZhurmes>  
    </Zhurma>  
    <Zhurma>  
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        <DataKoha>17-DEC-2019 08:00:00 AM</DataKoha>  
        <TipiPranuesit>Vendbanime Urbane</TipiPranuesit>  
        <VleraZhurmes>40</VleraZhurmes>  
    </Zhurma>  
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        <ZhurmaID>3</ZhurmaID>  
        <DataKoha>17-DEC-2019 09:00:00 AM</DataKoha>  
        <TipiPranuesit>Vendbanime Industriale</TipiPranuesit>  
        <VleraZhurmes>50</VleraZhurmes>  
    </Zhurma>  
  
</InstitutiHidrometeorogjik>