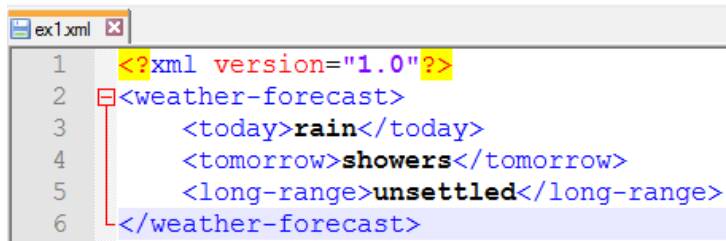


1.



```
1 <?xml version="1.0"?>
2 <weather-forecast>
3   <today>rain</today>
4   <tomorrow>showers</tomorrow>
5   <long-range>unsettled</long-range>
6 </weather-forecast>
```

1.1

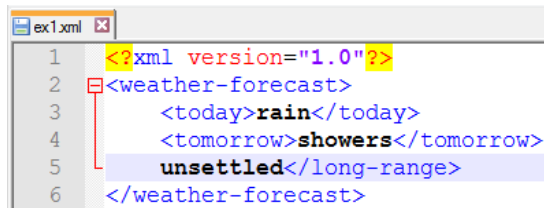
```
<?xml version="1.0"?>
- <weather-forecast>
  <today>rain</today>
  <tomorrow>showers</tomorrow>
  <long-range>unsettled</long-range>
</weather-forecast>
```

```
<?xml version="1.0"?>
+ <weather-forecast>
```

1.2 Version 1.0 of XML is being used.

1.3 The XML document is well-formed, meaning that the code is syntactically correct.

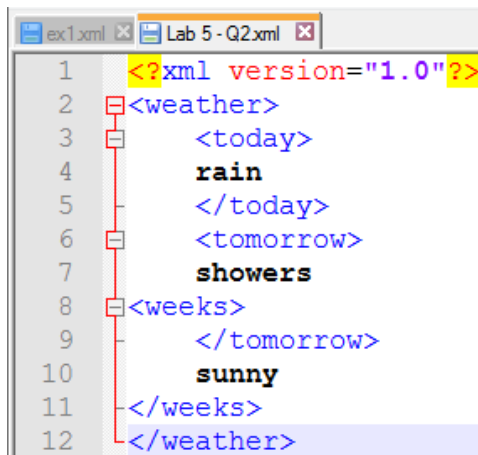
1.4



```
1 <?xml version="1.0"?>
2 <weather-forecast>
3   <today>rain</today>
4   <tomorrow>showers</tomorrow>
5   <long-range>unsettled</long-range>
6 </weather-forecast>
```


rain showers unsettled

2.



```
1 <?xml version="1.0"?>
2 <weather>
3   <today>
4     rain
5   </today>
6   <tomorrow>
7     showers
8   </tomorrow>
9   <weeks>
10    sunny
11  </weeks>
12 </weather>
```

## 2.1

 **Markup Validation Service**  
Check the markup (HTML, XHTML, ...) of Web documents


[Jump To:](#) [Notes and Potential Issues](#) [Validation Output](#)

**Errors found while checking this document as XML!**

<b>Result:</b>	2 Errors, 3 warning(s)
<b>Source:</b>	<pre>&lt;?xml version="1.0"?&gt; &lt;weather&gt;   &lt;today&gt;     rain   &lt;/today&gt;   &lt;tomorrow&gt;     showers   &lt;/tomorrow&gt;   &lt;weeks&gt;     sunny   &lt;/weeks&gt; &lt;/weather&gt;</pre>
<b>Encoding:</b>	utf-8 (detect automatically)
<b>Doctype:</b>	XML (detect automatically)
<b>Root Element:</b>	weather

## 2.2

```
1 <?xml version="1.0"?>
2 <weather>
3   <today>
4     rain
5   </today>
6   <tomorrow>
7     showers
8   </tomorrow>
9   <weeks>
10    sunny
11  </weeks>
12 </weather>
```

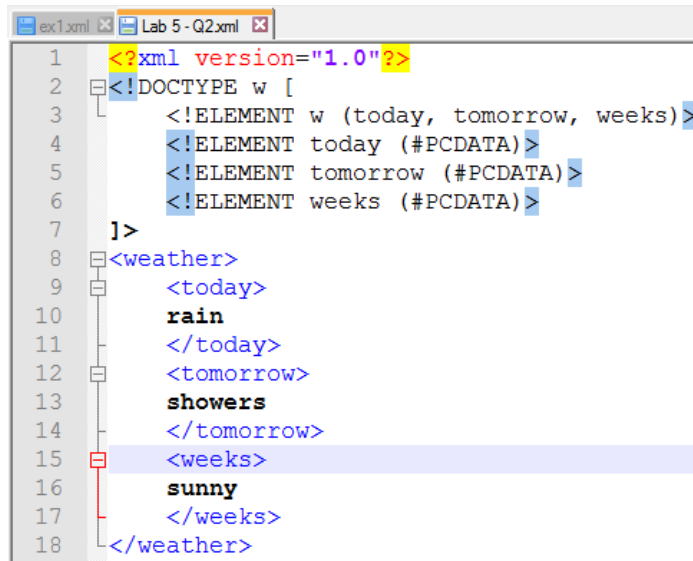
 **Markup Validation Service**  
Check the markup (HTML, XHTML, ...) of Web documents

[Jump To:](#) [Notes and Potential Issues](#) [Congratulations · Icons](#)

**This document was successfully checked as well-formed XML!**

<b>Result:</b>	Passed, 3 warning(s)
<b>Source:</b>	<pre>&lt;?xml version="1.0"?&gt; &lt;weather&gt;   &lt;today&gt;     rain   &lt;/today&gt;   &lt;tomorrow&gt;     showers   &lt;/tomorrow&gt;   &lt;weeks&gt;     sunny   &lt;/weeks&gt; &lt;/weather&gt;</pre>
<b>Encoding:</b>	utf-8 (detect automatically)
<b>Doctype:</b>	XML (detect automatically)
<b>Root Element:</b>	weather

## 2.3

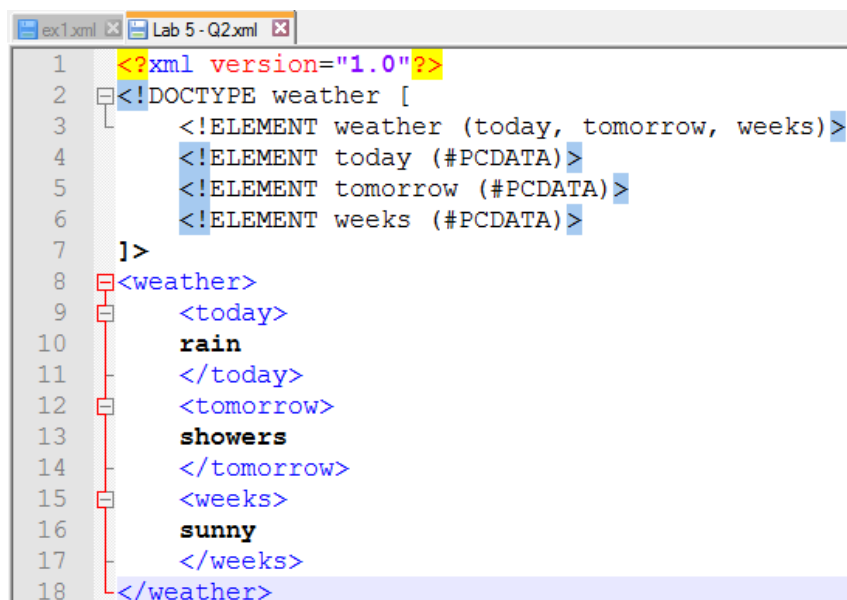


```
1 <?xml version="1.0"?>
2 <!DOCTYPE w [
3   <!ELEMENT w (today, tomorrow, weeks)>
4   <!ELEMENT today (#PCDATA)>
5   <!ELEMENT tomorrow (#PCDATA)>
6   <!ELEMENT weeks (#PCDATA)>
7 ]>
8 <weather>
9   <today>
10    rain
11  </today>
12  <tomorrow>
13    showers
14  </tomorrow>
15  <weeks>
16    sunny
17  </weeks>
18 </weather>
```

## 2.3.1

Errors found while checking this document as XML!	
Result:	2 Errors, 2 warning(s)
Source:	<pre>&lt;?xml version="1.0"?&gt; &lt;!DOCTYPE w [   &lt;!ELEMENT w (today, tomorrow, weeks)&gt;   &lt;!ELEMENT today (#PCDATA)&gt;   &lt;!ELEMENT tomorrow (#PCDATA)&gt;   &lt;!ELEMENT weeks (#PCDATA)&gt; ]&gt; &lt;weather&gt;   &lt;today&gt;     rain   &lt;/today&gt;   &lt;tomorrow&gt;</pre>
Encoding:	utf-8 (detect automatically)
Doctype:	XML (detect automatically)
Root Element:	weather

## 2.3.2



```
1 <?xml version="1.0"?>
2 <!DOCTYPE weather [
3   <!ELEMENT weather (today, tomorrow, weeks)>
4   <!ELEMENT today (#PCDATA)>
5   <!ELEMENT tomorrow (#PCDATA)>
6   <!ELEMENT weeks (#PCDATA)>
7 ]>
8 <weather>
9   <today>
10    rain
11  </today>
12  <tomorrow>
13    showers
14  </tomorrow>
15  <weeks>
16    sunny
17  </weeks>
18 </weather>
```

This document was successfully checked as XML!	
<b>Result:</b>	Passed, 2 warning(s)
<b>Source:</b>	<pre>&lt;?xml version="1.0"?&gt; &lt;!DOCTYPE weather [   &lt;!ELEMENT weather (today, tomorrow, weeks)&gt;   &lt;!ELEMENT today (#PCDATA)&gt;   &lt;!ELEMENT tomorrow (#PCDATA)&gt;   &lt;!ELEMENT weeks (#PCDATA)&gt; ]&gt; &lt;weather&gt;   &lt;today&gt;     rain   &lt;/today&gt;   &lt;tomorrow&gt;</pre>
<b>Encoding:</b>	utf-8 (detect automatically)
<b>Doctype:</b>	XML (detect automatically)
<b>Root Element:</b>	weather

## 2.3.3

```
ex1.xml x Lab 5 - Q2.xml x forecast.dtd x
1 <!DOCTYPE weather [
2   <!ELEMENT weather (today, tomorrow, weeks)>
3   <!ELEMENT today (#PCDATA)>
4   <!ELEMENT tomorrow (#PCDATA)>
5   <!ELEMENT weeks (#PCDATA)>
6 ]>
```

## 2.3.4

```
ex1.xml x Lab 5 - Q2.xml x forecast.dtd x
1 <?xml version="1.0" standalone="no"?>
2 <!DOCTYPE weather-forecast SYSTEM "forecast.dtd">
3 <weather>
4   <today>
5     rain
6   </today>
7   <tomorrow>
8     showers
9   </tomorrow>
10  <weeks>
11    sunny
12  </weeks>
13 </weather>
```

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼ <weather>
  <today>rain</today>
  <tomorrow>showers</tomorrow>
  <weeks>sunny</weeks>
</weather>
```

3.

```

1 <?xml version='1.0'?>
2 <!DOCTYPE qualifications SYSTEM "qualifications.dtd">
3 <qualifications>
4   <qualification>
5     <year>2001</year>
6     <diploma>Electronic Engineering</diploma>
7   </qualification>
8   <qualification>
9     <year>2005</year>
10    <degree>Computer Science</degree>
11  </qualification>
12  <higher-qualification/>
13  <institution>
14    <name>Oxford University</name>
15  </institution>
16  <institution>
17    <name>MIT</name>
18  </institution>
19 </qualifications>

```

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```

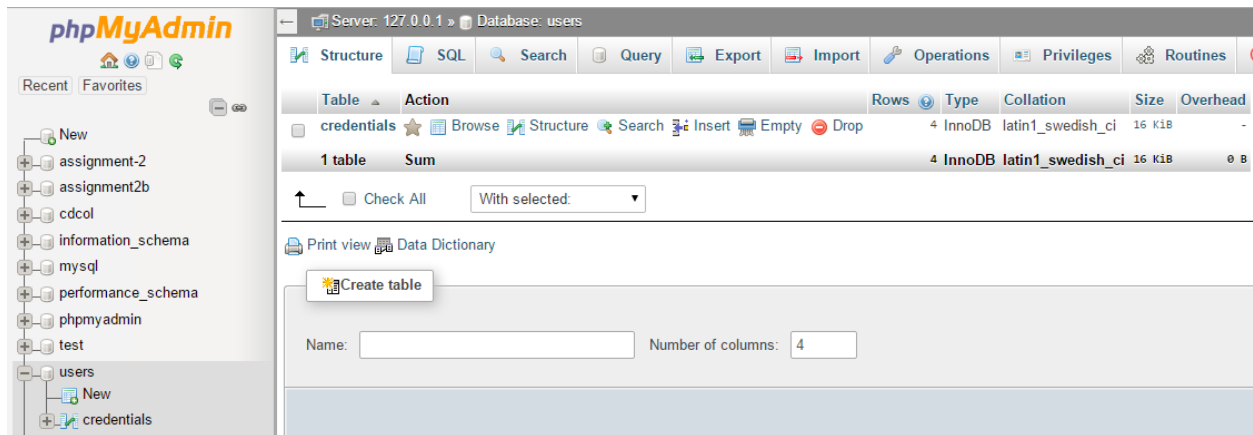
▼ <qualifications>
  ▼ <qualification>
    <year>2001</year>
    <diploma>Electronic Engineering</diploma>
  </qualification>
  ▼ <qualification>
    <year>2005</year>
    <degree>Computer Science</degree>
  </qualification>
  <higher-qualification/>
  ▼ <institution>
    <name>Oxford University</name>
  </institution>
  ▼ <institution>
    <name>MIT</name>
  </institution>
</qualifications>

```

- 3.1 XML is case sensitive, both the markup and the text.
- 3.2 The qualification element implements any of several choices (given by the | operator symbol).
- 3.3 The higher-qualification element is optional (given by the ? operator symbol).
- 3.4 Both the qualification and institution elements must be listed in the XML at least once (+).
- 3.5 In a Document Type Definition, the + operator symbol means there must be at least one or more appearances of an element in the XML.

4.

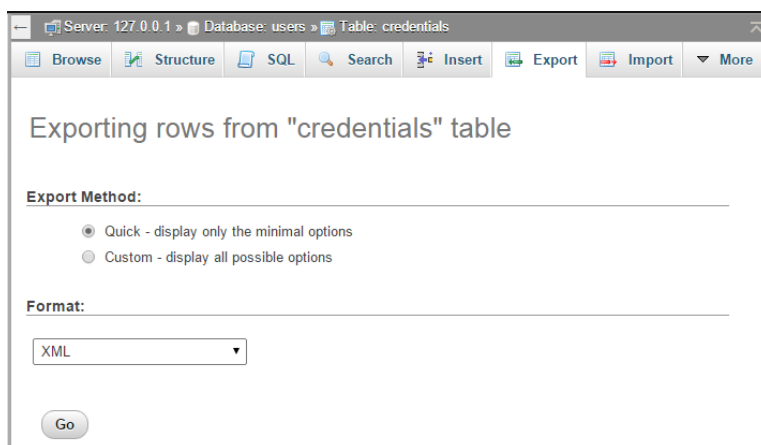
4.1



4.2

+ Options				
username	1	password	email	cv
alex		yellow	alex@hr.com	NULL
john		red	john@hr.com	NULL
liz		blue	liz@hr.com	NULL
simon		green	simon@hr.com	NULL

4.3/4.4



## 4.5

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```

▼<!--
- phpMyAdmin XML Dump
- version 4.4.14
- https://www.phpmyadmin.net
-
- Host: 127.0.0.1
- Generation Time: Nov 23, 2015 at 05:06 AM
- Server version: 5.6.26
- PHP Version: 5.6.12
-->
▼<pma_xml_export xmlns:pma="http://www.phpmyadmin.net/some_doc_url/" version="1.0">
  <!--
    - Structure schemas
    -->
  ▼<pma:structure_schemas>
    ▼<pma:database name="users" collation="latin1_swedish_ci" charset="latin1">
      ▼<pma:table name="credentials">
        CREATE TABLE `credentials` ( `username` varchar(30) NOT NULL, `password` varchar(50) NOT NULL, `email` varchar(50) NOT
        NULL, `cv` blob ) ENGINE=InnoDB DEFAULT CHARSET=latin1;
      </pma:table>
    </pma:database>
  </pma:structure_schemas>
  <!--
    - Database: 'users'
    -->
  ▼<database name="users">
    <!-- Table credentials -->
    ▼<table name="credentials">
      <column name="username">john</column>
      <column name="password">red</column>
      <column name="email">john@hr.com</column>
      <column name="cv">NULL</column>
    </table>
    ▼<table name="credentials">
      <column name="username">simon</column>
      <column name="password">green</column>
      <column name="email">simon@hr.com</column>
      <column name="cv">NULL</column>
    </table>
    ▼<table name="credentials">
      <column name="username">liz</column>
      <column name="password">blue</column>
      <column name="email">liz@hr.com</column>
      <column name="cv">NULL</column>
    </table>
    ▼<table name="credentials">
      <column name="username">alex</column>
      <column name="password">yellow</column>
      <column name="email">alex@hr.com</column>
      <column name="cv">NULL</column>
    </table>
  </database>
</pma_xml_export>

```

5.

5.1

```

1 <!DOCTYPE html>
2 <html>
3 <body>
4
5 <?php
6 $xml=simplexml_load_file("ex3.xml");
7 print_r($xml);
8 ?>
9
10 </body>
11 </html>

```

```

1 <?xml version='1.0'?>
2 <!DOCTYPE qualifications SYSTEM "qualifications.dtd">
3 <qualifications>
4   <qualification>
5     <year>2001</year>
6     <diploma>Electronic Engineering</diploma>
7   </qualification>
8   <qualification>
9     <year>2005</year>
10    <degree>Computer Science</degree>
11  </qualification>
12  <higher-qualification/>
13  <institution>
14    <name>Oxford University</name>
15  </institution>
16  <institution>
17    <name>MIT</name>
18  </institution>
19 </qualifications>

```

---

```

SimpleXMLElement Object ( [qualification] => Array ( [0] => SimpleXMLElement Object ( [year] => 2001 [diploma] => Electronic Engineering ) [1] => SimpleXMLElement Object ( [year] => 2005 [degree] => Computer Science ) ) [higher-qualification] => SimpleXMLElement Object ( ) [institution] => Array ( [0] => SimpleXMLElement Object ( [name] => Oxford University ) [1] => SimpleXMLElement Object ( [name] => MIT ) ) )

```