

Web Sciences

Directions: Create a 3-5 minute presentation that answers each of the following questions. Be sure to address the command term used in each question. The format of this assignment is up to you, options include:

- a PowerPoint presentation (or nearpod or other similar presentation that can be downloaded and then posted to the class web site on hwmath.net/IBCS)
- a video – which can be downloaded and then posted on hwmath.net/IBCS
- a poster – which will be posted in the classroom, as well as photographed and posted on hwmath.net/IBCS.

Part 1 : Web Science Terminology

- 1) Define the term HTML
- 2) Define the term HTTP
- 3) Define the term XML
- 4) Outline the principal difference between HTML and HTTP

Part 2: Applying the terminology

Consider the section of XML code shown below:

```
<bird>
  <name>Eagle Owl</name>
  <species>Bubo bubo</species>
  <description>An owl the size of an eagle</description>
  <habitat>Forests</habitat>
</bird>
```

- 5) Identify **one** similarity between HTML and XML.
- 6) One of the characteristics of XML code is the ability to describe data. By making direct reference to the XML code shown above, outline **one** way in which this characteristic is shown.
- 7) Review the XML Server section of http://www.w3schools.com/xml/xml_server.asp. [and other references as needed]. Describe how the structure of XML code allows data to be used to update a database.

Part 3: Practical Example

- 8) Create an XML file name **birds.xml** that is properly formatted with the example bird content above.
- 9) Create a style sheet that can be used to display the bird.xml file : name the file **birds.xsl**.

You can add additional information to the <bird> </bird> structure, for example Forests is a bit general for a habitat, forests in what part of the world – or what do they eat? You can also add information for additional birds or other species...