Exercises: XML

To simplify these examples, use simple strings and turn them into XML documents using parseFromString as below (you can also steal this function from document.js in the javascript-browser Eclipse project). In the next lecture, we will get the XML from an Ajax request instead, but getting the XML from strings is good for practicing and learning.

```
function getXmlDoc(xmlString) {
  var parser = new DOMParser();
  var xmlDocument =
    parser.parseFromString(xmlString, "application/xml");
  return(xmlDocument);
}
```

1. Write a function that will take an XML document and print out the parent node (top-level element) name. For example:
   ```
   var testString = "<a att1='Hello'><b att2='Hola'>Hi</b><c/></a>";
   var doc = getXmlDoc(testString);
   printNodeName(doc); --> Node: a
   ```

2. Write a function that will take an XML document and return the body content of the first node wsith the given name. For example:
   ```
   // Same doc as above
   bodyContent(doc, "b"); --> "Hi"
   ```

3. Write a function that will take an XML document and print out the parent node (top-level element) name and the attributes that the parent node has.
   ```
   // Same doc as above
   printNodeInfo1(doc); --> Node: a (att1=Hello)
   ```

4. Write a function that will take an XML document and print out the parent node (top-level element) name, the attributes that the parent node has, the child node names (immediately nested elements), and their attributes.
   ```
   // Same doc as above;
   printNodeInfo2(test); --> Node: a (att1=Hello)
                             Children: b (att2=Hola) c ()
   ```

5. Make a Web page with a textarea. Let the user enter some XML in the textarea. When they press a button, show the same info as in the previous problem. Insert this info into a div in the page.