

XML PARSING

1. Which mechanism do you use to directly change an XML file from one DTD into another?
 - a. XSLT
 - b. XPath
 - c. StaX
 - d. SAX
 - e. Schema
 - f. Sample Code

2.

```
DocumentBuilderFactory factory =DocumentBuilderFactory.newInstance();
DocumentBuilder builder = factory.newDocumentBuilder();
Document doc = builder.newDocument();
Node node1 = doc.createElement("node1");
Node node2 = doc.createElement("node2");
Node node3 = doc.createTextNode("Hello, World");
doc.appendChild(node2);
node1.appendChild(node3);
node3 = doc.createElement("node4");
node2.appendChild(node1);
node1 = doc.createTextNode("Good-bye");
node2.appendChild(node3);
node3.appendChild(node1);
```

Which code sequence is the XML tree for the document created with the sample code above?

- a.

```
<node2>
    <node4>Good-bye</node4>
    <node1>Hello, World</node1>
</node2>
```
- b.

```
<node1>
    <node2>Hello, World</node2>
    <node4>Good-bye</node4>
</node1>
```
- c.

```
<node1>
    <node4>Good-bye</node4>
    <node2>Hello, World</node2>
node1>
```
- d.

```
<node1>
    <node2>Hello, World</node2>
    <node3>Good-bye</node3>
</node1>
```
- e.

```
<node2>
    <node1>Hello, World</node1>
    <node4>Good-bye</node4>
</node2>
```

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3. File f = . . .

```
DocumentBuilderFactory factory=DocumentBuilderFactory.newInstance();
DocumentBuilder builder = factory.newDocumentBuilder();
Document document=builder.newDocument() ;
// Get the first <example> element in the DOM
// ???
// Use a Transformer for output
TransformerFactory tFactory = TransformerFactory.newInstance () ;
Transformer transformer = tFactory.newTransformer () ;
DOMSource source = new DOMSource (document) ;
StreamResult result = new StreamResult (System.out) ;
transformer.transform ( source, result) ;
```

Which code snippet do you insert in place of ??? in the sample code above, to get the first example node from the DOM tree before dumping its subtree?

- a. `NodeList list =document.getElementsByTagName ("example");`
`Node node = list.item(1) ;`
- b. `ElementList list = document.getElementByTagName ("example");`
`Node node = list.item(1) ;`
- c. `Node node = document.getElementByTagName ("example");`
- d. `ElementList list = document.getElementsByTagName ("example");`
`Node node = list.item(0);`
- e. `NodeList list = Document.getElementsByTagName ("example");`
`Node node = list.item(0);`

4. You are reading an XML file with a SAX parser, and you need to create a subclass to handle error cases. To do this, you choose to use the superclass, which serves as the default base class for SAX error handling.

Based on the above scenario, what is the name of the superclass and the interface it must implement?

- a. `DefaultHandler` and `ErrorHandler`
- b. `DefaultHandler` and `ContentHandler`
- c. `BaseHandler` and `ErrorHandler`
- d. `DefaultBaseHandler` and `ErrorHandler`
- e. `DefaultBaseHandler` and `ContentHandler`