

JAVA XPATH PARSER - QUERY XML DOCUMENT

http://www.tutorialspoint.com/java_xml/java_xpath_query_document.htm

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Demo Example

Here is the input text file we need to query:

```
<?xml version="1.0"?>
<class>
  <student rollno="393">
    <firstname>dinkar</firstname>
    <lastname>kad</lastname>
    <nickname>dinkar</nickname>
    <marks>85</marks>
  </student>
  <student rollno="493">
    <firstname>Vaneet</firstname>
    <lastname>Gupta</lastname>
    <nickname>vinni</nickname>
    <marks>95</marks>
  </student>
  <student rollno="593">
    <firstname>jasvir</firstname>
    <lastname>singn</lastname>
    <nickname>jazz</nickname>
    <marks>90</marks>
  </student>
</class>
```

Demo Example:

XPathParserDemo.java

```
package com.tutorialspoint.xml;

import java.io.File;
import java.io.IOException;

import javax.xml.parsers.DocumentBuilderFactory;
import javax.xml.parsers.DocumentBuilder;
import javax.xml.parsers.ParserConfigurationException;
import javax.xml.xpath.XPath;
import javax.xml.xpath.XPathConstants;
import javax.xml.xpath.XPathExpressionException;
import javax.xml.xpath.XPathFactory;

import org.w3c.dom.Document;
import org.w3c.dom.NodeList;
import org.w3c.dom.Node;
import org.w3c.dom.Element;
import org.xml.sax.SAXException;

public class XPathParserDemo {
    public static void main(String[] args) {
        try {
            File inputFile = new File("input.txt");
            DocumentBuilderFactory dbFactory
                = DocumentBuilderFactory.newInstance();
            DocumentBuilder dBuilder;

            dBuilder = dbFactory.newDocumentBuilder();

            Document doc = dBuilder.parse(inputFile);
            doc.getDocumentElement().normalize();
```

```

XPath xPath = XPathFactory.newInstance().newXPath();

String expression = "/class/student[@rollno='493']";
NodeList nodeList = (NodeList) xPath.compile(expression).evaluate(doc,
XPathConstants.NODESET);
for (int i = 0; i < nodeList.getLength(); i++) {
    Node nNode = nodeList.item(i);
    System.out.println("\nCurrent Element : "
        + nNode.getNodeName());
    if (nNode.getNodeType() == Node.ELEMENT_NODE) {
        Element eElement = (Element) nNode;
        System.out.println("Student roll no : "
            + eElement.getAttribute("rollno"));
        System.out.println("First Name : "
            + eElement
                .getElementsByTagName("firstname")
                .item(0)
                .getTextContent());
        System.out.println("Last Name : "
            + eElement
                .getElementsByTagName("lastname")
                .item(0)
                .getTextContent());
        System.out.println("Nick Name : "
            + eElement
                .getElementsByTagName("nickname")
                .item(0)
                .getTextContent());
        System.out.println("Marks : "
            + eElement
                .getElementsByTagName("marks")
                .item(0)
                .getTextContent());
    }
}
} catch (ParserConfigurationException e) {
    e.printStackTrace();
} catch (SAXException e) {
    e.printStackTrace();
} catch (IOException e) {
    e.printStackTrace();
} catch (XPathExpressionException e) {
    e.printStackTrace();
}
}
}

```

This would produce the following result:

```

Current Element :student
Student roll no : 493
First Name : Vaneet
Last Name : Gupta
Nick Name : vinni
Marks : 95

```