

WriteXml

```
import org.w3c.dom.Document;
import org.w3c.dom.Element;

import javax.xml.parsers.DocumentBuilder;
import javax.xml.parsers.DocumentBuilderFactory;
import javax.xml.transform.Transformer;
import javax.xml.transform.TransformerFactory;
import javax.xml.transform.dom.DOMSource;
import javax.xml.transform.stream.StreamResult;
import java.io.File;

/**
 * Project Dijkstra Algorithm
 * This class is used to start the project
 *
 * @author Hakan Tanis
 * @author Kevin Adamczewski
 * @author Jonas Litmeyer
 * Date 30.05.2018
 * @version 3.0
 *
 * Last Change:
 * by: Kevin Adamczewski
 * date: 04.06.2018
 */
public class WriteXml
{
    /**
     * Create xml.
     */
    public void createXML()
    {
        HalfOrder halfOrder = new HalfOrder();
        halfOrder.init();

        try
        {
            DocumentBuilderFactory dbF = DocumentBuilderFactory.newInstance();
            DocumentBuilder dBuilder = dbF.newDocumentBuilder();

            Document doc = dBuilder.newDocument();

            Element rootElement = doc.createElement("Nodes");
            doc.appendChild(rootElement);

            Element nodes = doc.createElement("Node");
            rootElement.appendChild(nodes);
        }
    }
}
```

```

        WriteXml
        for (int i = 0; i < halfOrder.nodes.size(); i++)
        {
            Node node = halfOrder.returnNode(i);
            System.out.println(i + ". Node = " + node);
            node.generateXml(doc, nodes);
        }

        Element edges = doc.createElement("Edge");
        rootElement.appendChild(edges);
        for (int i = 0; i < halfOrder.edges.size() ; i++)
        {
            Edge edge = halfOrder.returnEdge(i);
            System.out.println((i + 1) + ". Edge = " + edge);
            edge.generateXml(doc, edges);
        }

        TransformerFactory transformerFactory =
TransformerFactory.newInstance();
        Transformer transformer = transformerFactory.newTransformer();
        DOMSource source = new DOMSource(doc);
        StreamResult result = new StreamResult(new
File("C:\\Users\\Kevin\\Desktop\\tsp.xml"));
        transformer.transform(source, result);
    } catch (Exception e)
    {
        e.printStackTrace();
    }
}

/**
 * The entry point of application.
 *
 * @param args the input arguments
 */
public static void main(String[] args)
{
    WriteXml xml = new WriteXml();
    xml.createXML();
}
}

```