**CREATING FILE :**

package module8;

import javax.xml.parsers.\*;

import java.io.\*;

import org.w3c.dom.\*;

import javax.xml.transform.\*;

import javax.xml.transform.dom.\*;

import javax.xml.transform.stream.\*;

public class CS1 {

public static void main(String[] args) {

DocumentBuilderFactory f = DocumentBuilderFactory.newInstance();

DocumentBuilder b = null;

try

{

b = f.newDocumentBuilder();

}

catch(ParserConfigurationException e)

{

e.printStackTrace();

}

Document doc = b.newDocument();

Element rootele = doc.createElement("students");

Element studentele = doc.createElement("student");

Element idele = doc.createElement("id");

Element nameele = doc.createElement("name");

Element stdele = doc.createElement("std");

Element genderele = doc.createElement("gender");

Element marksele = doc.createElement("marks");

Element addressele = doc.createElement("address");

Text t1 = doc.createTextNode("001");

Text t2 = doc.createTextNode("Tanuja");

Text t3 = doc.createTextNode("IX");

Text t4 = doc.createTextNode("Female");

Text t5 = doc.createTextNode("95");

Text t6 = doc.createTextNode("Warje , Pune");

idele.appendChild(t1);

nameele.appendChild(t2);

stdele.appendChild(t3);

genderele.appendChild(t4);

marksele.appendChild(t5);

addressele.appendChild(t6);

studentele.appendChild(idele);

studentele.appendChild(nameele);

studentele.appendChild(stdele);

studentele.appendChild(genderele);

studentele.appendChild(marksele);

studentele.appendChild(addressele);

rootele.appendChild(studentele);

doc.appendChild(rootele);

Transformer t = null;

try {

t = TransformerFactory.newInstance().newTransformer();

}

catch(TransformerConfigurationException e1)

{

e1.printStackTrace();

}

catch(TransformerFactoryConfigurationError e1)

{

e1.printStackTrace();

}

try {

t.transform(new DOMSource(doc), new StreamResult(new FileOutputStream("/home/ubuntu/students.xml")));

}

catch(FileNotFoundException e)

{

e.printStackTrace();

}

catch(TransformerException e)

{

e.printStackTrace();

}

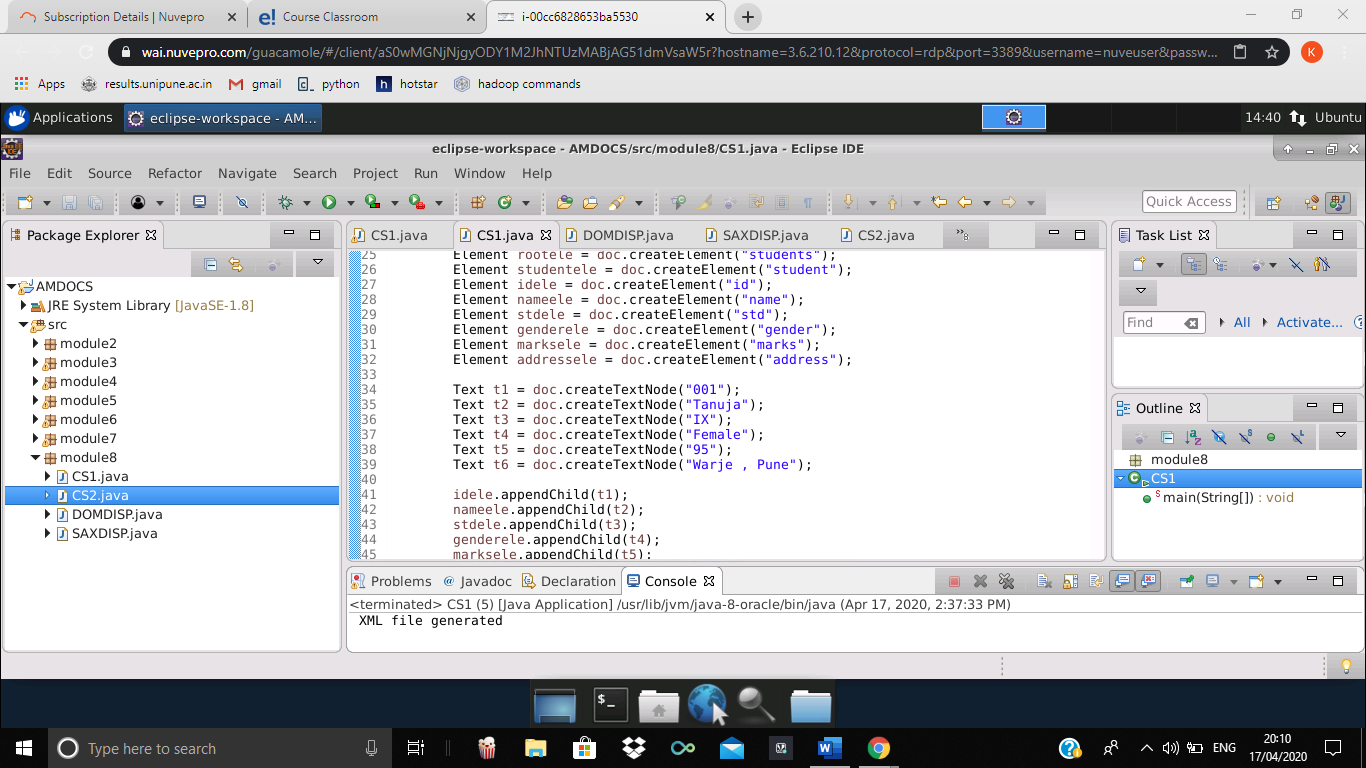
System.out.println(" XML file generated ");

}

}

**OUTPUT :**

XML file generated



**DISPLAY USING DOM :**

package module8;

import javax.xml.parsers.\*;

import java.io.\*;

import org.w3c.dom.\*;

public class DOMDISP {

public static void main(String[] args) {

try {

File f = new File("/home/ubuntu/students.xml");

DocumentBuilderFactory dbFactory = DocumentBuilderFactory.newInstance();

DocumentBuilder dBuilder = dbFactory.newDocumentBuilder();

Document doc = dBuilder.parse(f);

System.out.println("Root Element :" + doc.getDocumentElement().getNodeName());

NodeList nList = doc.getElementsByTagName("student");

System.out.println(" <-- " +nList.getLength() + " --> ");

for(int temp=0; temp<nList.getLength(); temp++)

{

Node nNode = nList.item(temp);

System.out.println("Current Element :" +nNode.getNodeName());

if(nNode.getNodeType() == Node.ELEMENT\_NODE)

{

Element ele = (Element) nNode;

System.out.println("Id :" + ele.getElementsByTagName("id").item(0).getTextContent());

System.out.println("Name :" + ele.getElementsByTagName("name").item(0).getTextContent());

System.out.println("Standard :" + ele.getElementsByTagName("std").item(0).getTextContent());

System.out.println("Gender :" + ele.getElementsByTagName("gender").item(0).getTextContent());

System.out.println("Marks :" + ele.getElementsByTagName("marks").item(0).getTextContent());

System.out.println("Address :" + ele.getElementsByTagName("address").item(0).getTextContent());

}

}

}

catch(Exception e)

{

e.printStackTrace();

}

}

}

**OUTPUT :**

Root Element :students

<-- 1 -->

Current Element :student

Id :001

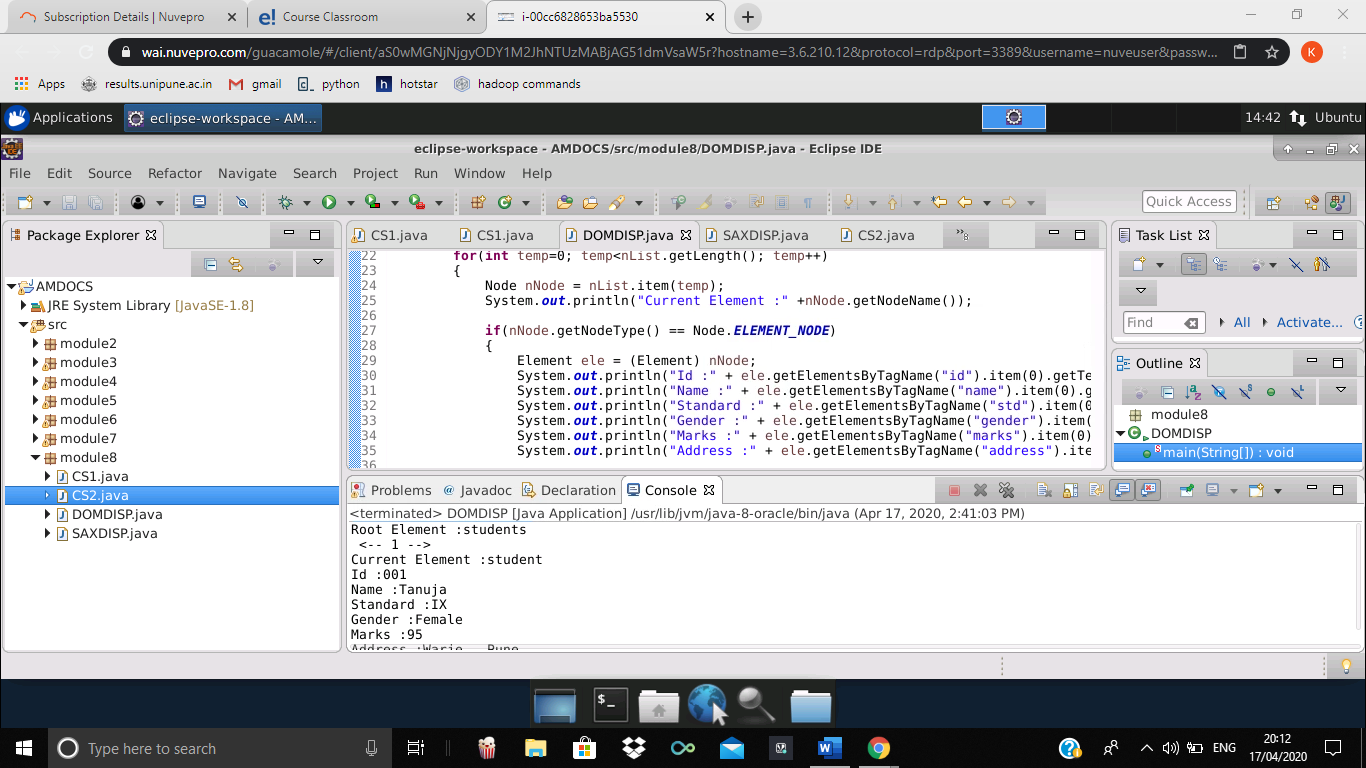
Name :Tanuja

Standard :IX

Gender :Female

Marks :95

Address :Warje , Pune



**OUTPUT USING SAX :**

package module8;

import javax.xml.parsers.\*;

import java.io.\*;

import org.xml.sax.helpers.\*;

import org.xml.sax.\*;

public class SAXDISP extends DefaultHandler {

public void startDocument()

{

System.out.println("Document starts here");

}

public void startElement(String uri, String localName, String qName, Attributes attrs)

{

System.out.print("<" + qName + ">");

}

public void characters(char ch[], int start, int len)

{

System.out.print(new String(ch,start,len));

}

public void endElement(String uri, String localName, String qName)

{

System.out.println("</" + qName + ">");

}

public void endDocument()

{

System.out.println("Document ends here");

}

public static void main(String[] args) throws Exception{

SAXParser p = SAXParserFactory.newInstance().newSAXParser();

p.parse(new FileInputStream("/home/ubuntu/employees.xml"), new SAXDISP());

}

}

**OUTPUT :**

Document starts here

<students><student><id>001</id>

<name>Tanuja</name>

<std>IX</std>

<gender>Female</gender>

<marks>95</marks>

<address>Warje , Pune</address>

</student>

</students>

Document ends here

