

Problem Statement:

Create an XML document that contains 10 users information. Write a java program, which takes user id as input and returns user details by taking the user information by using xml document by using DOM Parser.

File name: dom.java

Source Code:

```
import javax.xml.parsers.*;
import org.w3c.dom.*;
import java.io.*;
import java.util.*;
class dom
{
    public static void main(String args[])
    {
        try
        {
            Scanner sc=new Scanner(System.in);
            System.out.print("Enter userid : ");
            String userid=sc.next();
            DocumentBuilderFactory
dbFactory=DocumentBuilderFactory.newInstance();
            DocumentBuilder dBuilder = dbFactory.newDocumentBuilder();
            Document doc = dBuilder.parse("users.xml");
            Element root = doc.getDocumentElement();
            NodeList children=root.getChildNodes();
            for (int i=0;i<children.getLength();i++)
            {
                Node node=children.item(i);
                if(node.getNodeType()==Node.ELEMENT_NODE)
                {
                    Element element = (Element) node;
                    String id = element.getAttribute("userid");
                    if(id.equals(userid))
                    {
                        String name =
element.getElementsByTagName("name").item(0).getTextContent();
                        String age =
element.getElementsByTagName("age").item(0).getTextContent();
                        String address =
element.getElementsByTagName("address").item(0).getTextContent();
                        String email =
element.getElementsByTagName("email").item(0).getTextContent();
                        System.out.println("User ID : " + id);
                        System.out.println("Name : " + name);
                        System.out.println("Age : " + age);
                        System.out.println("Address : " + address);
                        System.out.println("Email : " + email);
                    }
                }
            }
        }
        catch (Exception e)
```

```
        {  
            e.printStackTrace();  
        }  
    }  
}
```

File name: users.xml

Source Code:

```
<?xml version="1.0"?>  
<users>  
    <user userid = "501">  
        <name>Satwika</name>  
        <age>25</age>  
        <address>Nizamabad</address>  
        <email>sat@gmail.com</email>  
    </user>  
    <user userid="502">  
        <name>Chaithanya</name>  
        <age>20</age>  
        <address>Hyderabad</address>  
        <email>chaithu@gmail.com</email>  
    </user>  
    <user userid="503">  
        <name>Manoj</name>  
        <age>25</age>  
        <address>Sathupalli</address>  
        <email>manoj@gmail.com</email>  
    </user>  
    <user userid="504">  
        <name>Adam</name>  
        <age>25</age>  
        <address>NagarKurnool</address>  
        <email>adam@gmail.com</email>  
    </user>  
    <user userid="505">  
        <name>Lakshman</name>  
        <age>37</age>  
        <address>kammareddy</address>  
        <email>lucky@gmail.com</email>  
    </user>  
    <user userid="506">  
        <name>Vishnu</name>  
        <age>29</age>  
        <address>L.B.Nagar</address>  
        <email>vishnu@gmail.com</email>  
    </user>  
    <user userid="507">  
        <name>akhila</name>  
        <age>21</age>  
        <address>hyderabad</address>  
        <email>akhila@gmail.com</email>  
    </user>  
    <user userid="508">  
        <name>Rana</name>  
        <age>24</age>
```

```
<address>Kurnool</address>
<email>rana08@gmail.com</email>
</user>
<user userid="509">
  <name>Ganesh</name>
  <age>33</age>
  <address>Sathupalli</address>
  <email>gani4@gmail.com</email>
</user>
<user userid="510">
  <name>Chris</name>
  <age>27</age>
  <address>karimnagar</address>
  <email>chris@gmail.com</email>
</user>
</users>
```

OUTPUT:

```

Microsoft Windows [Version 10.0.17763.864]
(c) 2018 Microsoft Corporation. All rights reserved.

C:\Users\ADMIN>cd/

C:\>cd C:\xampp\htdocs\le507

C:\xampp\htdocs\le507>javac dom.java

C:\xampp\htdocs\le507>java dom
Enter userid : 507
User ID : 507
Name : akhila
Age : 21
Address : hyderabad
Email : akhila@gmail.com

C:\xampp\htdocs\le507>
```

Problem Statement: Create an XML document that contains 10 users information. Write a java program, which takes user id as input and returns user details by taking the user information by using xml document by using SAX Parser

Program:

File name: SaxParser.java

Source Code:

```
import java.io.*;
import javax.xml.parsers.SAXParser;
import javax.xml.parsers.SAXParserFactory;
import org.xml.sax.Attributes;
import org.xml.sax.SAXException;
import org.xml.sax.helpers.DefaultHandler;
public class SaxParser extends DefaultHandler
{
    boolean studentid = true,name = false,address = false,gender = false;
    int flag=0,c=0;
    String sid,sname,sadd,sgender,tid;
    public void startDocument(){
        System.out.println("begin parsing document");
        System.out.print("Enter student ID: ");
        try{
            BufferedReader reader = new BufferedReader(new InputStreamReader(System.in));
            tid = reader.readLine();
        }catch(Exception e){ }
    }
    public void startElement(String url,String localname, String qName, Attributes att){
        if (qName.equalsIgnoreCase("studentid")){
            studentid = true;
        }
        else if (qName.equalsIgnoreCase("name") && flag==1){
            name = true;
        }
        else if (qName.equalsIgnoreCase("address")&& flag==1){
            address = true;
        }
        else if (qName.equalsIgnoreCase("gender")&& flag==1){
            gender = true;
        }
    }
    public void characters(char[] ch,int start,int length){
        if (studentid)
        {
            String x=new String(ch, start, length);
            if(x.equals(tid)){
                flag=1;sid=x; c=1;
            }
            else
            flag=0;
            studentid = false;
        }
        else if (name){
            sname=new String(ch, start, length); name = false;
        }
    }
}
```

```
else if (address){
sadd=new String(ch, start, length); address = false;
}
else if (gender){
sgender=new String(ch, start, length); gender = false;
}
}
public void endElement(String url,String localname, String qName){ }
public void endDocument()
{
if(c==0)
System.out.println("student Id is not present.Try Again!!!");
else
{
System.out.println("\n\n STUDENT-DETAILS");
System.out.println("=====");
System.out.println("student id :\t" +sid);
System.out.println("student Name :\t" +sname);
System.out.println("Address :\t" +sadd);
System.out.println("Gender :\t" +sgender);
}
}
public static void main(String[] arg)throws Exception{
SAXParser p=SAXParserFactory.newInstance().newSAXParser();
p.parse(new FileInputStream("student.xml"), new SaxParser());
}
}
```

File name: student.xml

Source Code:

```
<?xml version="1.0" encoding="UTF-8"?>
<students-details>
<student>
    <studentid>101</studentid>
    <name>Mounika</name>
    <address>Sathupalli</address>
    <gender>Female</gender>
</student>
<student>
    <studentid>102</studentid>
    <name>Suman</name>
    <address>Hyderabad</address>
    <gender>Male</gender>
</student>
<student>
    <studentid>103</studentid>
    <name>varsha</name>
    <address>warangal</address>
    <gender>Female</gender>
</student>
<student>
    <studentid>104</studentid>
    <name>Sri Vidya</name>
    <address>Khammam</address>
    <gender>Female</gender>
```

```
</student>
<student>
  <studentid>105</studentid>
  <name>venkat</name>
  <address>Jorgan</address>
  <gender>Male</gender>
</student>
<student>
  <studentid>106</studentid>
  <name>Akhil</name>
  <address>Recharla</address>
  <gender>Male</gender>
</student>
<student>
  <studentid>107</studentid>
  <name>Harshitha</name>
  <address>Ramanthapur</address>
  <gender>Female</gender>
</student>
<student>
  <studentid>108</studentid>
  <name>mohan</name>
  <address>Nizambad</address>
  <gender>Male</gender>
</student>
<student>
  <studentid>109</studentid>
  <name>Sahara</name>
  <address>Paris</address>
  <gender>Female</gender>
</student>
<student>
  <studentid>110</studentid>
  <name>Sandeep</name>
  <address>Kolkata</address>
  <gender>Male</gender>
</student>
</students-details>
```

Output:

```
C:\xampp\htdocs\le507>javac sax.java
```

```
C:\xampp\htdocs\le507>java sax
begin parsing document
Enter student ID: 507
```

STUDENT-DETAILS

```
=====
student id :    507
student Name :  Harshitha
Address :       Ramanthapur
Gender :        Female
```

```
C:\xampp\htdocs\le507>
```
