

## dom.java

```
import org.w3c.dom.*;
import javax.xml.parsers.*;
import java.util.Scanner;

public class dom{
    public static void main(String[] args)    {
        DocumentBuilderFactory dbf=DocumentBuilderFactory.newInstance();
        try{
            DocumentBuilder db=dbf.newDocumentBuilder();
            Document doc=db.parse("input.xml");
            Scanner s=new Scanner(System.in);
            System.out.println("\nEnter the roll no: ");
            String r=s.next();
            //System.out.println(doc.getDocumentElement().getNodeName());
            NodeList l=doc.getElementsByTagName("student");
            for(int i=0;i<l.getLength();i++){
                Node n=l.item(i);
                if(n.getNodeType()==Node.ELEMENT_NODE){
                    Element elt=(Element)n;
                    if(elt.getAttribute("rno").equals(r)){
                        System.out.println("Roll no : " +
elt.getAttribute("rno"));
                        System.out.println("Name : " +
elt.getElementsByTagName("name").item(0).getTextContent());
                        System.out.println("Address : "+
elt.getElementsByTagName("address").item(0).getTextContent());
                        System.out.println("Mobile :
"+elt.getElementsByTagName("mob").item(0).getTextContent());
                    }
                }
            }
        }
        catch(Exception e){    System.out.println(e);    }
    }
}
```

## input.xml

```
<?xml version="1.0" encoding="UTF-8"?>

<class>
    <student rno="1">
        <name>Snneha</name>
        <address>Third road</address>
        <mob>9884006632</mob>
    </student>

    <student rno="2">
        <rollno>2</rollno>
```

```
        <name>Vaish</name>
        <address>Second road</address>
        <mob>91761906832</mob>
    </student>

    <student rno="3">
        <name>jack</name>
        <address>first road</address>
        <mob>8764423632</mob>
    </student>

    <student rno="4">
        <name>jill</name>
        <address>fourth road</address>
        <mob>7338766632</mob>
    </student>

    <student rno="5">
        <name>humpty</name>
        <address>fifth road</address>
        <mob>678889632</mob>
    </student>
</class>
```

## OUTPUT:

```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.18362.720]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\vaish\Desktop\IP_LAB\dom>java dom

Enter the roll no:
1
Roll no : 1
Name : Snneha
Address : Third road
Mobile : 9884006632

C:\Users\vaish\Desktop\IP_LAB\dom>java dom

Enter the roll no:
2
Roll no : 2
Name : Vaish
Address : Second road
Mobile : 91761906832

C:\Users\vaish\Desktop\IP_LAB\dom>■
```

## saxParser.java

```
import org.xml.sax.*;
import javax.xml.parsers.*;
import java.util.Scanner;
import org.xml.sax.helpers.DefaultHandler;

public class saxParser {
    public static void main(String args[]){
        SAXParserFactory spf=SAXParserFactory.newInstance();
        try{
            SAXParser sp=spf.newSAXParser();
            Scanner s=new Scanner(System.in);
            System.out.println("\nEnter the roll no: ");
            String r=s.next();
            UserHandler handler = new UserHandler(r);
            sp.parse("input.xml", handler);
        }
        catch(Exception e){System.out.println(e);}
    }
}

class UserHandler extends DefaultHandler {

    boolean fname = false;
    boolean fadd = false;
    boolean fmob = false;
    String r = null;
    String rollno=null;

    public UserHandler(String r){
        this.r=r;
    }

    public void startElement(String uri, String localName,String qName,
        Attributes att) throws SAXException {

        if (qName.equals("student"))
            rollno=att.getValue("rno");
        if(r.equals(rollno))
        {

            if (qName.equals("name"))
                fname = true;

            if (qName.equals("address"))
                fadd = true;

            if (qName.equals("mob"))
                fmob = true;
        }
    }
}
```

```

    }

    public void endElement(String uri, String localName,
        String qName) throws SAXException {
        //System.out.println("End Element : " + qName);
    }

    public void characters(char ch[], int start, int length) throws SAXException {

        if (fname) {
            System.out.println("Name : " + new String(ch, start, length));
            fname = false;
        }

        if (fadd) {
            System.out.println("Address : " + new String(ch, start, length));
            fadd = false;
        }

        if (fmob) {
            System.out.println("Mobile: " + new String(ch, start, length));
            fmob = false;
        }
    }
}

```

## OUTPUT:

```

C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.18362.720]
(c) 2019 Microsoft Corporation. All rights reserved.

C:\Users\vaish\Desktop\IP_LAB\sax>javac saxParser.java

C:\Users\vaish\Desktop\IP_LAB\sax>java saxParser

Enter the roll no:
3
Name : jack
Address : first road
Mobile: 8764423632

C:\Users\vaish\Desktop\IP_LAB\sax>java saxParser

Enter the roll no:
2
Name : Vaish
Address : Second road
Mobile: 91761906832

C:\Users\vaish\Desktop\IP_LAB\sax>

```

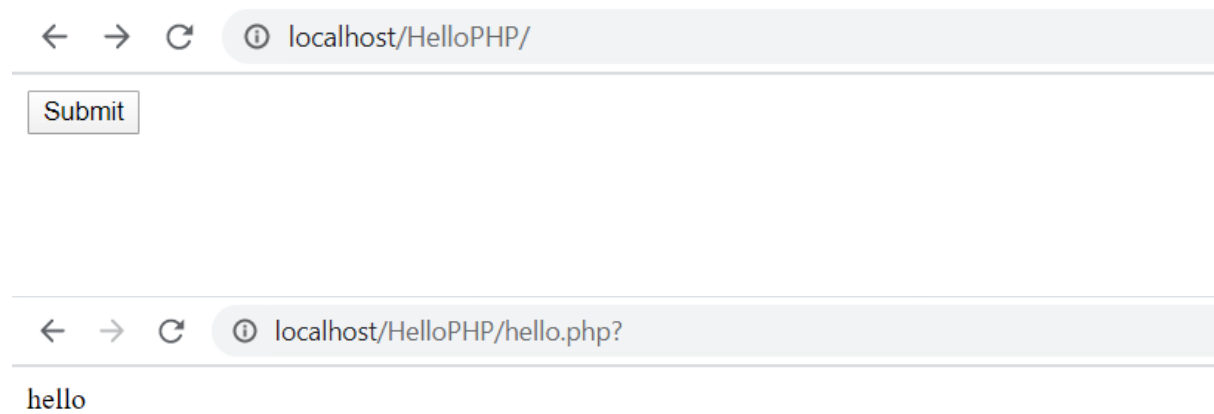
### index.html

```
<html>
<body>
<form method="get" action="hello.php">
<input type="submit" >
</form>
</body>
</html>
```

### hello.php

```
<?php
echo "hello"
?>
```

### OUTPUT:



The screenshot shows a web browser window. The address bar displays 'localhost/HelloPHP/'. Below the address bar, there is a 'Submit' button. The browser window is titled 'localhost/HelloPHP/'.

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The screenshot shows a web browser window. The address bar displays 'localhost/HelloPHP/hello.php?'. Below the address bar, the word 'hello' is displayed.

## index.html

```
<html>
<body>
<h3>CRUD PHP</h3>

<form method="get" action="insert.php">
Enter name: <input type="text" name="t1"><br><br>
Enter age: <input type="text" name="t2"><br><br>
Enter dob: <input type="text" name="t3"><br><br>
Enter address: <input type="text" name="t4"><br><br>
Enter mobile no: <input type="text" name="t5"><br><br>
Enter email id: <input type="text" name="t6"><br><br>
<input type="submit" value="Insert record"><br><br>
</form>

<form method="get" action="update.php">
Enter name: <input type="text" name="t1"><br><br>
Enter age: <input type="text" name="t2"><br><br>
Enter dob: <input type="text" name="t3"><br><br>
Enter address: <input type="text" name="t4"><br><br>
Enter mobile no: <input type="text" name="t5"><br><br>
Enter email id: <input type="text" name="t6"><br><br>
<input type="submit" value="Update record"><br><br>
</form>

<form method="get" action="delete.php">
Enter name: <input type="text" name="t1"><br><br>
<input type="submit" value="Delete record"><br>
</form>

<form method="get" action="display.php">
<input type="submit" value="Display records">
</form>

</body>
</html>
```

## delete.php

```
<html>
<?php

$con=new mysqli("localhost:3306","root","","test");
if($con->connect_error)
    echo "Falied";
else
{

$sql = "select * from stud";
$result = $con->query($sql);
```

```

echo "<br><p>Before deletion</p>";
echo "<br><table border='1'>";
echo
"<tr><th>NAME</th><th>AGE</th><th>DATE</th><th>ADDRESS</th><th>PHONE</th><th>EMAIL<
/th></tr>";
if ($result->num_rows>0)
{
while ($row = $result->fetch_assoc())
    echo
"<tr><td>".$row["name"]."</td><td>".$row["age"]."</td><td>".$row["dob"]."</td><td>".$row["add
r"]."</td><td>".$row["mob"]."</td><td>".$row["email"]."</td></tr>";
}
echo "</table>";

$del = "delete from stud where name=?";
$stmt=mysqli_prepare($con,$del);
mysqli_stmt_bind_param($stmt,"s",$name);
$name=$_GET["t1"];
mysqli_stmt_execute($stmt);

echo "<br><p>After deletion</p>";
$result = $con->query($sql);
echo "<br><table border='1'>";
echo
"<tr><th>NAME</th><th>AGE</th><th>DATE</th><th>ADDRESS</th><th>PHONE</th><th>EMAIL<
/th></tr>";
if ($result->num_rows>0)
{
while ($row = $result->fetch_assoc())
    echo
"<tr><td>".$row["name"]."</td><td>".$row["age"]."</td><td>".$row["dob"]."</td><td>".$row["add
r"]."</td><td>".$row["mob"]."</td><td>".$row["email"]."</td></tr>";
}
echo "</table>";
}
?>
</html>

```

### display.php

```

<html>
<?php
$con=new mysqli("localhost:3306","root","","test");
if($con->connect_error)
    echo "Falied";
else
{

$sql = "select * from stud";
$result = $con->query($sql);
echo "<br><table border='1'>";

```

```

echo
"<tr><th>NAME</th><th>AGE</th><th>DATE</th><th>ADDRESS</th><th>PHONE</th><th>EMAIL<
/th></tr>";
if ($result->num_rows>0)
{
while ($row = $result->fetch_assoc())
    echo
"<tr><td>".$row["name"]."</td><td>".$row["age"]."</td><td>".$row["dob"]."</td><td>".$row["add
r"]."</td><td>".$row["mob"]."</td><td>".$row["email"]."</td></tr>";
}
echo "</table>";

}
?>
</html>

```

### insert.php

```

<html>

<?php

$regexName = '/^[A-Za-z]+$/';
$regexAge = '/^[0-9]{2}$/';
$regexNum = '/^[0-9]{10}$/';
$regexMail = '/^[a-zA-Z][a-zA-Z0-9]+\@[a-z]+\.[a-z]+$/';

$flag=0;

$name=$_GET["t1"];
$age=$_GET["t2"];
$dob=$_GET["t3"];
$addr=$_GET["t4"];
$mob=$_GET["t5"];
$email=$_GET["t6"];

if(preg_match($regexName, $name)) {
    if(preg_match($regexAge, $age)) {
        if(preg_match($regexNum, $mob)) {
            if(preg_match($regexMail, $email)) {
                $flag=1;
            }
            else {
                echo "Invalid e-mail id";
            }
        }
        else {
            echo "Invalid phone number";
        }
    }
    else {

```



```

        echo "Invalid age";
    }
}
else {
    echo "Invalid name";
}

echo "<br><br>";

if($flag==1)
{
$con=new mysqli("localhost:3306","root","","test");
if($con->connect_error)
    echo "Falied";
else
{

$sql = "select * from stud";
$result = $con->query($sql);
echo "<br><p>Before insertion</p>";
echo "<br><table border='1'>";
echo
"<tr><th>NAME</th><th>AGE</th><th>DATE</th><th>ADDRESS</th><th>PHONE</th><th>EMAIL<
/th></tr>";
if ($result->num_rows>0)
{
while ($row = $result->fetch_assoc())
    echo
"<tr><td>".$row["name"]."</td><td>".$row["age"]."</td><td>".$row["dob"]."</td><td>".$row["add
r"]."</td><td>".$row["mob"]."</td><td>".$row["email"]."</td></tr>";
}
echo "</table>";

$ins = "insert into stud values(?,?,?,?,?)";
$stmt=mysqli_prepare($con,$ins);
mysqli_stmt_bind_param($stmt,"sssss",$name,$age,$dob,$addr,$mob,$email);

mysqli_stmt_execute($stmt);

echo "<br><p>After insertion</p>";
$result = $con->query($sql);
echo "<br><table border='1'>";
echo
"<tr><th>NAME</th><th>AGE</th><th>DATE</th><th>ADDRESS</th><th>PHONE</th><th>EMAIL<
/th></tr>";
if ($result->num_rows>0)
{
while ($row = $result->fetch_assoc())
    echo
"<tr><td>".$row["name"]."</td><td>".$row["age"]."</td><td>".$row["dob"]."</td><td>".$row["add
r"]."</td><td>".$row["mob"]."</td><td>".$row["email"]."</td></tr>";
}
}
}

```

```
}  
echo "</table>";
```

```
}  
}  
?>  
</html>
```

### update.php

```
<html>  
<?php
```

```
$regexName = '/^[A-Za-z]+$/';  
$regexAge = '/^[0-9]{2}$/';  
$regexNum = '/^[0-9]{10}$/';  
$regexMail = '/^[a-zA-Z][a-zA-Z0-9]+\@[a-z]+\.[a-z]+$/';
```

```
$flag=0;
```

```
$name=$_GET["t1"];  
$age=$_GET["t2"];  
$dob=$_GET["t3"];  
$addr=$_GET["t4"];  
$mob=$_GET["t5"];  
$email=$_GET["t6"];
```

```
    if(preg_match($regexName, $name)) {  
        if(preg_match($regexAge, $age)) {  
            if(preg_match($regexNum, $mob)) {  
                if(preg_match($regexMail, $email)) {  
                    $flag=1;  
                }  
                else {  
                    echo "Invalid e-mail id";  
                }  
            }  
            else {  
                echo "Invalid phone number";  
            }  
        }  
        else {  
            echo "Invalid age";  
        }  
    }  
    else {  
        echo "Invalid name";  
    }  
  
    echo "<br><br>";
```

```

if($flag==1)
{
$con=new mysqli("localhost:3306","root","","test");
if($con->connect_error)
    echo "Falied";
else
{

$sql = "select * from stud";
$result = $con->query($sql);
echo "<br><p>Before updation</p>";
echo "<br><table border='1'>";
echo
"<tr><th>NAME</th><th>AGE</th><th>DATE</th><th>ADDRESS</th><th>PHONE</th><th>EMAIL<
/th></tr>";
if ($result->num_rows>0)
{
while ($row = $result->fetch_assoc())
    echo
"<tr><td>".$row["name"]."</td><td>".$row["age"]."</td><td>".$row["dob"]."</td><td>".$row["add
r"]."</td><td>".$row["mob"]."</td><td>".$row["email"]."</td></tr>";
}
echo "</table>";

$upd = "update stud set  age=?, dob=?, addr=?, mob=?, email=? where name=?";
$stmt=mysqli_prepare($con,$upd);
mysqli_stmt_bind_param($stmt,"ssssss",$age,$dob,$addr,$mob,$email,$name);

mysqli_stmt_execute($stmt);

echo "<br><p>After updation</p>";
$result = $con->query($sql);
echo "<br><table border='1'>";
echo
"<tr><th>NAME</th><th>AGE</th><th>DATE</th><th>ADDRESS</th><th>PHONE</th><th>EMAIL<
/th></tr>";
if ($result->num_rows>0)
{
while ($row = $result->fetch_assoc())
    echo
"<tr><td>".$row["name"]."</td><td>".$row["age"]."</td><td>".$row["dob"]."</td><td>".$row["add
r"]."</td><td>".$row["mob"]."</td><td>".$row["email"]."</td></tr>";
}
echo "</table>";

}
}
?>
</html>

```

## OUTPUT:

[←](#) [→](#) [↻](#) [🔒](#) localhost/DataPHP/

### CRUD PHP

Enter name:

Enter age:

Enter dob:

Enter address:

Enter mobile no:

Enter email id:

Enter name:

Enter age:

Enter dob:

Enter address:

Enter mobile no:

Enter email id:

Enter name:

[←](#) [→](#) [↻](#) [🔒](#) localhost/DataPHP/display.php?

NAME	AGE	DATE	ADDRESS	PHONE	EMAIL
vaishu	20	13-12-1999	Third st	7338766815	vaishu@gmail.com
aishu	20	10-11-1999	First st	8762134685	aishu@gmail.com
suja	50	20-07-1980	Tenth st	9962188067	sujanew@gmail.com
santhi	40	13-07-1970	Fifth st	912345678	santhi@gmail.com
abi	20	13-10-1999	Tenth st	76125402	abi@gmail.com

← → ↻ ⓘ localhost/DataPHP/

## CRUD PHP

Enter name:

Enter age:

Enter dob:

Enter address:

Enter mobile no:

Enter email id:

← → ↻ ⓘ localhost/DataPHP/insert.php?t1=raja123&t2=55&t3=26-02-1965&t4=First+st&t5

Invalid name

← → ↻ ⓘ localhost/DataPHP/

## CRUD PHP

Enter name:

Enter age:

Enter dob:

Enter address:

Enter mobile no:

Enter email id:

← → ↻ ⓘ localhost/DataPHP/insert.php?t1=raja&t2=555&t3=26-02-

Invalid age

← → ↻ ⓘ localhost/DataPHP/

## CRUD PHP

Enter name:

Enter age:

Enter dob:

Enter address:

Enter mobile no:

Enter email id:

← → ↻ ⓘ localhost/DataPHP/insert.php?t1=raj

Invalid phone number

← → ↻ ⓘ localhost/DataPHP/

## CRUD PHP

Enter name:

Enter age:

Enter dob:

Enter address:

Enter mobile no:

Enter email id:

← → ↻ ⓘ localhost/DataPHP/insert.php?t1=raja&t2=55&t3=26-02-1965&t4=First+st&t5=9176196

Invalid e-mail id

## CRUD PHP

Enter name:

Enter age:

Enter dob:

Enter address:

Enter mobile no:

Enter email id:

Before insertion

NAME	AGE	DATE	ADDRESS	PHONE	EMAIL
vaishu	20	13-12-1999	Third st	7338766815	vaishu@gmail.com
aishu	20	10-11-1999	First st	8762134685	aishu@gmail.com
suja	50	20-07-1980	Tenth st	9962188067	sujanew@gmail.com
santhi	40	13-07-1970	Fifth st	912345678	santhi@gmail.com
abi	20	13-10-1999	Tenth st	76125402	abi@gmail.com

After insertion

NAME	AGE	DATE	ADDRESS	PHONE	EMAIL
vaishu	20	13-12-1999	Third st	7338766815	vaishu@gmail.com
aishu	20	10-11-1999	First st	8762134685	aishu@gmail.com
suja	50	20-07-1980	Tenth st	9962188067	sujanew@gmail.com
santhi	40	13-07-1970	Fifth st	912345678	santhi@gmail.com
abi	20	13-10-1999	Tenth st	76125402	abi@gmail.com
raja	55	26-02-1965	First st	9176196870	raj@gmail.com

Enter name:

Enter age:

Enter dob:

Enter address:

Enter mobile no:

Enter email id:

← → ↻ ⓘ localhost/DataPHP/update.php?t1=raja&t2=40&t3=01-01-1990&t4=S

Before updation

NAME	AGE	DATE	ADDRESS	PHONE	EMAIL
vaishu	20	13-12-1999	Third st	7338766815	vaishu@gmail.com
aishu	20	10-11-1999	First st	8762134685	aishu@gmail.com
suja	50	20-07-1980	Tenth st	9962188067	sujanew@gmail.com
santhi	40	13-07-1970	Fifth st	912345678	santhi@gmail.com
abi	20	13-10-1999	Tenth st	76125402	abi@gmail.com
raja	55	26-02-1965	First st	9176196870	raj@gmail.com

After updation

NAME	AGE	DATE	ADDRESS	PHONE	EMAIL
vaishu	20	13-12-1999	Third st	7338766815	vaishu@gmail.com
aishu	20	10-11-1999	First st	8762134685	aishu@gmail.com
suja	50	20-07-1980	Tenth st	9962188067	sujanew@gmail.com
santhi	40	13-07-1970	Fifth st	912345678	santhi@gmail.com
abi	20	13-10-1999	Tenth st	76125402	abi@gmail.com
raja	40	01-01-1990	Sixth st	9888887766	raja@gmail.com



Enter name:

Delete record

← → ↻ ⓘ localhost/DataPHP/delete.php?t1=suja

Before deletion

NAME	AGE	DATE	ADDRESS	PHONE	EMAIL
vaishu	20	13-12-1999	Third st	7338766815	vaishu@gmail.com
aishu	20	10-11-1999	First st	8762134685	aishu@gmail.com
suja	50	20-07-1980	Tenth st	9962188067	sujanew@gmail.com
santhi	40	13-07-1970	Fifth st	912345678	santhi@gmail.com
abi	20	13-10-1999	Tenth st	76125402	abi@gmail.com
raja	40	01-01-1990	Sixth st	9888887766	raja@gmail.com

After deletion

NAME	AGE	DATE	ADDRESS	PHONE	EMAIL
vaishu	20	13-12-1999	Third st	7338766815	vaishu@gmail.com
aishu	20	10-11-1999	First st	8762134685	aishu@gmail.com
santhi	40	13-07-1970	Fifth st	912345678	santhi@gmail.com
abi	20	13-10-1999	Tenth st	76125402	abi@gmail.com
raja	40	01-01-1990	Sixth st	9888887766	raja@gmail.com