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Java Program To Get Hostname of IP Address And Read Data From URL

Code:

```
// Java program to illustrate
// InetAddress class methods
import java.io.IOException;
import java.net.InetAddress;
import java.util.Arrays;

public class Main
{
    public static void main(String[] args) throws IOException
    {

        String url = "www.vitap.ac.in";
        byte addr[] = { 127, 0, 0, 1 };

        // getByName() method
        InetAddress ip1 = InetAddress.getByName(url);
        System.out.println("getByName() : " + ip1);

        // getByAddress() method
        InetAddress ip2 = InetAddress.getByAddress(addr);
        System.out.println("getByAddress() : " + ip2);

        // getLocalHost() method
        InetAddress ip3 = InetAddress.getLocalHost();
        System.out.println("getLocalHost() : " + ip3);

        // getLoopbackAddress() method
        InetAddress ip4 = InetAddress.getLoopbackAddress();
        System.out.println("getLoopbackAddress() : " + ip4);

        // getAllByName() method - returns all ip addresses
        // associated with google.com
        InetAddress addrs[] = InetAddress.getAllByName("www.google.com");
        System.out.println("Google ip addresses : " + Arrays.toString(addrs));

        InetAddress addrs1[] = InetAddress.getAllByName("www.vitap.ac.in");
        System.out.println("VIT-AP ip addresses : " + Arrays.toString(addrs1));

        InetAddress ip5 = InetAddress.getByName("www.google.co.in");
        System.out.println("Google.co.in : " + ip5);
    }
}
```

```

        // isReachable() method
        boolean isreach = ip1.isReachable(5);
        System.out.println("ip1 isReachable() : " + isreach);

        // getHostname() method
        String hostname = ip1.getHostName();
        System.out.println("ip1 hostname : " + hostname);

        // getCanonicalHostname() method
        System.out.println("ip1 CanonicalHostname : " + ip1.getCanonicalHostName());

        // toString() method
        System.out.println("ip1 toString() : " + ip1.toString());
    }
}

```

Output:

```

C:\Users\saima\Desktop>java Main
getByName() : www.vitap.ac.in/5.9.36.52
getByAddress() : /127.0.0.1
getLocalHost() : MADHAV-DELL/192.168.191.1
getLoopbackAddress() : localhost/127.0.0.1
Google ip addresses : [www.google.com/142.251.42.36, www.google.com/2404:6800:4007:822:0:0:2004]
VIT-AP ip addresses : [www.vitap.ac.in/5.9.36.52]
Google.co.in : www.google.co.in/172.217.166.35
ip1 isReachable() : false
ip1 hostname :www.vitap.ac.in
ip1 CanonicalHostname : static.52.36.9.5.clients.your-server.de
ip1 toString() : www.vitap.ac.in/5.9.36.52

C:\Users\saima\Desktop>

```

Read Data From URL:

Code:

```
import java.net.*;
import java.io.*;
public class URLReader
{
    public static void main(String[] args)
    {
        String output = getUrlContents("https://vtop2.vitap.ac.in/vtop");
        System.out.println(output);
    }

    private static String getUrlContents(String theUrl)
    {
        StringBuilder content = new StringBuilder();
        // Use try and catch to avoid the exceptions
        try
        {
            URL url = new URL(theUrl); // creating a url object
            URLConnection urlConnection = url.openConnection(); // creating a urlconnection object

            // wrapping the urlconnection in a bufferedreader
            BufferedReader bufferedReader = new BufferedReader(new
InputStreamReader(urlConnection.getInputStream()));
            String line;
            // reading from the urlconnection using the bufferedreader
            while ((line = bufferedReader.readLine()) != null)
            {
                content.append(line + "\n");
            }
            bufferedReader.close();
        }
        catch(Exception e)
        {
            e.printStackTrace();
        }
        return content.toString();
    }
}
```

Output:

```
C:\Users\saima\Desktop>javac URLReader.java
C:\Users\saima\Desktop>java URLReader
<!DOCTYPE html>
<!--
    Author: Anthoniraj Amalanathan
    Date :
-->
<html>
<head>
    <base href="https://vtop2.vitap.ac.in/vtop/" />
    <link rel="stylesheet" href="assets/plugins/css/AdminLTECompatibility.css"/>
    <link rel="stylesheet" href="assets/bootstrap/css/bootstrap.css" />
</head>

<body>


    <div id="closedHTML">

        <div class="row">
            <div class="col-md-9" style="float: none; margin: 0 auto; margin-top: 30px;">

                <div class="box box-info">

                    <div class="box-header with-border">
                        <h4><b>Session Timed out</b></h4>
                    </div>

                    <div class="box-body">
                        <div class="text-center">
                            <div>
                                <h3><code>You are logged out due to inactivity for more than 15 minutes</code></h3>
                                <br/>
                                <a href="/vtop/" class="btn btn-success pull-right">Login to VTOP</a>
                            </div>
                        </div>
                    </div>
                </div>
            </div>
        </div>
    </div>

    <script>
        $(function() {
            var content = $('#closedHTML').html();
            $('#page_outline').replaceWith('<div id="page-closed" class="col-md-12 content-center">' + content + '</div>');
        });
    </script>

</body>
</html>
```