

**Course Name: A Level (2nd Sem)**  
**Topic: Socket Programming(part 2)**

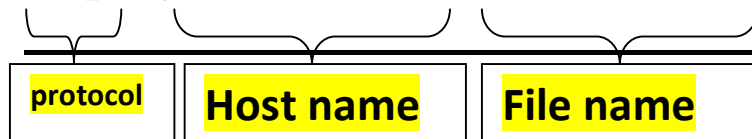
**Subject: JAVA**  
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## **Java URL class:**

Class URL represents a Uniform Resource Locator, a pointer to a "resource" on the World Wide Web. A resource can be something as simple as a file or a directory, or it can be a reference to a more complicated object, such as a query to a database or to a search engine.

## **Example:**

http://java.sun.com/FAQ.html



## **Explanation:**

In general, a URL can be broken into several parts. The previous example of a URL indicates that the protocol to use is http (HyperText Transport Protocol) and that the information resides on a host machine named http:java.sun.com/FAQ.html. The information normally resides in a file, but it could be generated on the fly. This component of the URL is called the file component, even though the information is not necessarily in a file.

A URL can optionally specify a "port", which is the port number to which the TCP connection is made on the remote host machine. If the port is not specified, the default port for the protocol is used instead.

## **Some commonly used public methods of the URL class are:**

String getProtocol()	it returns the protocol of the URL.
String getHost()	It returns the hostname of the URL.
String getPort()	it returns the Port Number of the URL.
String getFile()	returns the file name of the URL.

## **Example of URL class:**

```

import java.io.*;
import java.net.*;
public class URL1
{
    public static void main(String[] args)
    {
        try
        {
            URL u = new URL("http://nielit.gov.in/gorakhpur/content/course-assignments");

            System.out.println("Protocol: " + u.getProtocol());
            System.out.println("Port Number: " + u.getPort());
            System.out.println("File Name: " + u.getFile());
            System.out.println("Host Name: " + u.getHost());
            System.out.println("DEFAULT Port Number: " + u.getDefaultPort());
            System.out.println("QUERY: " + u.getQuery());
            System.out.println("PATH: " + u.getPath());

        } catch (Exception ex)
        {
            System.out.println(ex);
        }
    }
}

```

### **Note:**

1. If port number is not mentioned in the URL, it returns -1.
2. In our program ,getQuery() method will show null because no query has been resolved. If you want to display a query copy, the url when you search something on google.

### **Exercise:**

1. How to get a Port number from a URL in Java.
2. How to show a query searched on any search engine using URL class.