

Practical No-6

```
import java.net.*;

public class InetAddressDemo {

    public static void main(String[] args) {

        try {

            // Using getByName() to get InetAddress object for a specific host

            InetAddress inetAddress = InetAddress.getByName("www.google.com");

            System.out.println("IP Address of www.google.com: " + inetAddress.getHostAddress());

            System.out.println("Host Name: " + inetAddress.getHostName());


            // Using getLocalHost() to get the InetAddress of the local machine

            InetAddress localAddress = InetAddress.getLocalHost();

            System.out.println("Local Machine IP Address: " + localAddress.getHostAddress());

            System.out.println("Local Host Name: " + localAddress.getHostName());


            // Using getAllByName() to get all IP addresses of a host

            InetAddress[] allAddresses = InetAddress.getAllByName("www.google.com");

            System.out.println("\nAll IP Addresses of www.google.com:");

            for (InetAddress addr : allAddresses) {

                System.out.println(addr.getHostAddress());

            }

        }

    }

}
```

```

    } catch (UnknownHostException e) {

        System.out.println("Error: Unable to resolve host");

        e.printStackTrace();

    }

}

}

```

Save the file with a .java extension, for example: InetAddressDemo.java.

Compile the Program

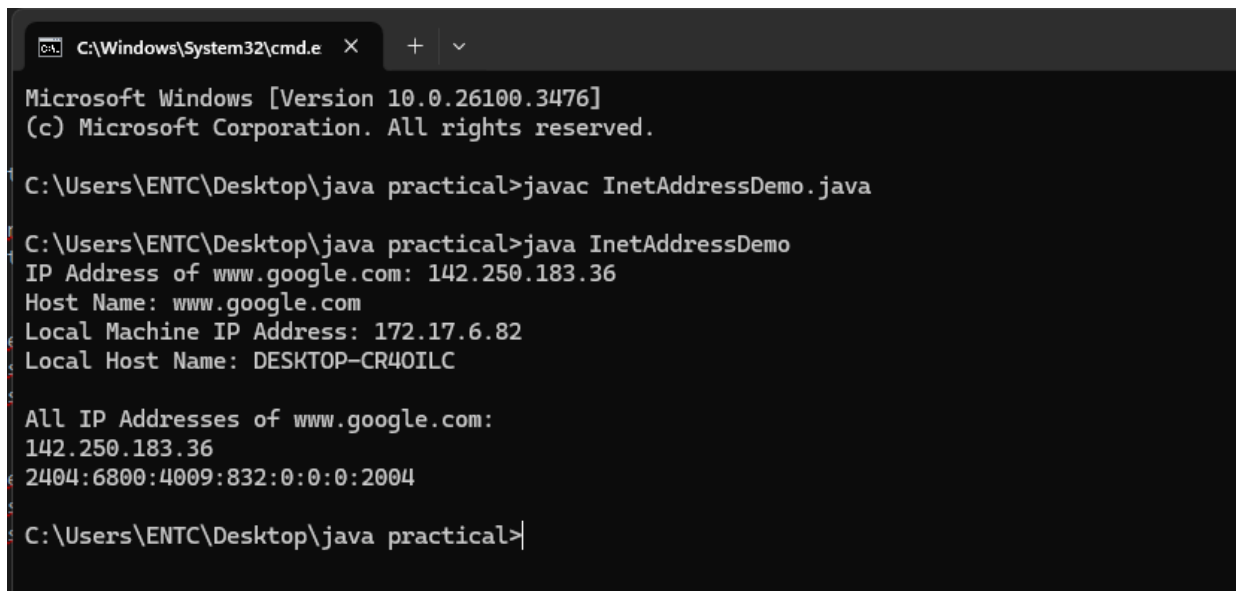
Open a terminal or command prompt.

```
javac InetAddressDemo.java
```

4. Run the Program

```
java InetAddressDemo
```

The output will display the IP address of www.google.com, the IP address of your local machine, and all IP addresses associated with www.google.com.



```

C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.26100.3476]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ENTC\Desktop\java practical>javac InetAddressDemo.java

C:\Users\ENTC\Desktop\java practical>java InetAddressDemo
IP Address of www.google.com: 142.250.183.36
Host Name: www.google.com
Local Machine IP Address: 172.17.6.82
Local Host Name: DESKTOP-CR40ILC

All IP Addresses of www.google.com:
142.250.183.36
2404:6800:4009:832:0:0:0:2004

C:\Users\ENTC\Desktop\java practical>

```