Output:

```
PS D:\6sem\NP\assignment> javac PrintIPAddress.java
PS D:\6sem\NP\assignment> java PrintIPAddress
IP Address: 202.45.144.31
PS D:\6sem\NP\assignment>
```

Output:

```
PS D:\6sem\NP\assignment> javac LocalIPAddress.java
PS D:\6sem\NP\assignment> java LocalIPAddress
Local Host Name: LAPTOP-5TCV7BB4
Local IP Address: 192.168.1.116
PS D:\6sem\NP\assignment>
```

Output

```
PS D:\6sem\NP\assignment> javac CanonicalHostnameFinder.java
PS D:\6sem\NP\assignment> java CanonicalHostnameFinder 172.217.0.0
>>
Canonical Hostname: ord38s04-in-f0.1e100.net
PS D:\6sem\NP\assignment>
```

Output:

```
PS D:\6sem\NP\assignment> javac LocalMachineInfo.java
PS D:\6sem\NP\assignment> java LocalMachineInfo
Local Host Name: LAPTOP-5TCV7BB4
Local IP Address: 192.168.1.116
PS D:\6sem\NP\assignment>
```

Output:

```
PS D:\6sem\NP\assignment> javac GetIPAddresses.java
PS D:\6sem\NP\assignment> java GetIPAddresses
Usage: java GetIPAddresses <webaddress>
PS D:\6sem\NP\assignment> java GetIPAddresses www.google.com
>>
Addresses for: www.google.com
IPv4 Address: 142.250.182.36
PS D:\6sem\NP\assignment>
```

Output:

```
PS D:\6sem\NP\assignment> javac IPAddressTypeChecker.java
PS D:\6sem\NP\assignment> java IPAddressTypeChecker 192.168.1.1
The IP address 192.168.1.1 is IPv4.
PS D:\6sem\NP\assignment>
```

Output:

```
PS D:\6sem\NP\tmgAnil> javac IPAddressCharacteristics.java
PS D:\6sem\NP\tmgAnil> java IPAddressCharacteristics 192.168.1.1
IP Address: 192.168.1.1
Type: IPv4
Loopback Address: No
Multicast Address: No
Site-local Address: Yes
PS D:\6sem\NP\tmgAnil>
```

Output

```
PS D:\6sem\NP\tmgAnil> javac DomainNameComparison.java
PS D:\6sem\NP\tmgAnil> java DomainNameComparison www.ibiblio.org bellos.ibiblio.org
Error: Unable to resolve one or both domain names.
PS D:\6sem\NP\tmgAnil> java DomainNameComparison www.google.com www.facebook.com
www.google.com and www.facebook.com resolve to different IP addresses.
PS D:\6sem\NP\tmgAnil>
```

Output:

```
PS D:\6sem\NP\tmgAnil> javac ListNetworkInterfaces.java
PS D:\6sem\NP\tmgAnil> java ListNetworkInterfaces
Name: lo
Display Name: Software Loopback Interface 1
Is Up: true
Is Loopback: true
Is Virtual: false
Is PointToPoint: false
IP Addresses:
  127.0.0.1
  0:0:0:0:0:0:0:1

Name: net0
Display Name: Microsoft Wi-Fi Direct Virtual Adapter #2
Is Up: false
Is Loopback: false
Is Virtual: false
Is PointToPoint: false
IP Addresses:

Name: net1
Display Name: Microsoft 6to4 Adapter
Is Up: false
Is Loopback: false
Is Virtual: false
Is PointToPoint: false
IP Addresses:
```

Output:

```
PS D:\6sem\NP\tmgAnil> javac ListNetworkInterfaces.java
PS D:\6sem\NP\tmgAnil> java ListNetworkInterfaces
Name: lo
Display Name: Software Loopback Interface 1
Is Up: true
Is Loopback: true
Is Virtual: false
Is PointToPoint: false
IP Addresses:
  127.0.0.1
  0:0:0:0:0:0:0:1

Name: net0
Display Name: Microsoft Wi-Fi Direct Virtual Adapter #2
Is Up: false
Is Loopback: false
Is Virtual: false
Is PointToPoint: false
IP Addresses:

Name: net1
Display Name: Microsoft 6to4 Adapter
Is Up: false
Is Loopback: false
Is Virtual: false
Is PointToPoint: false
IP Addresses:
```
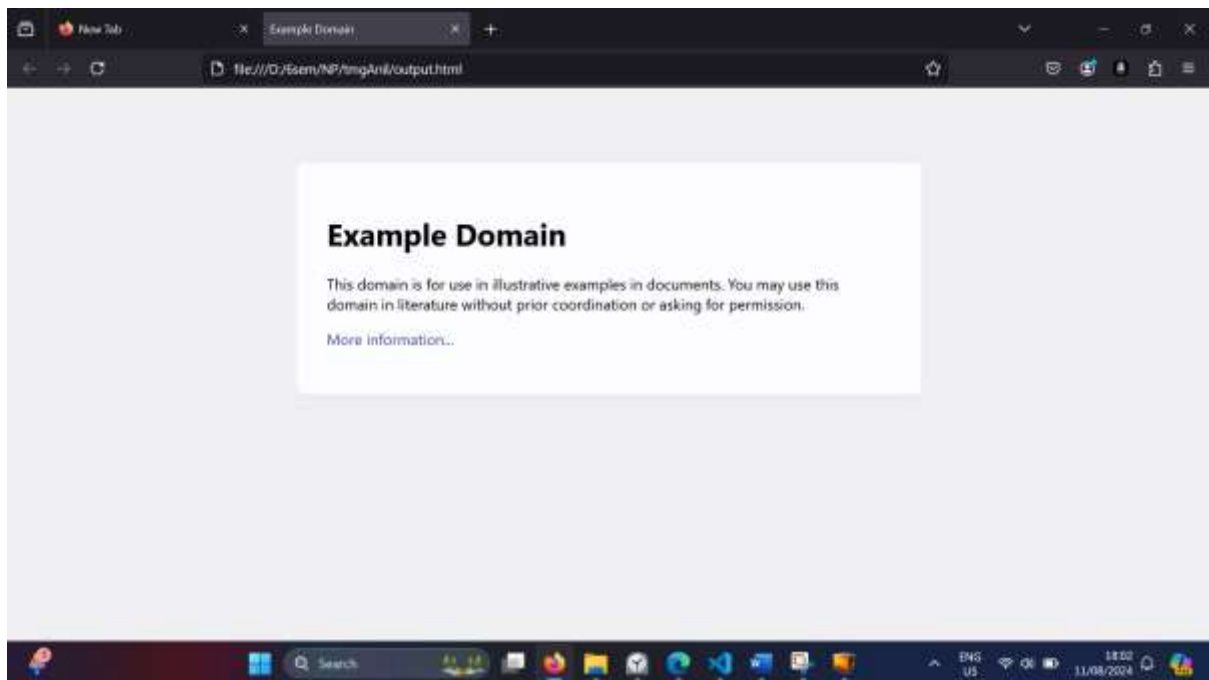
Output:

```
PS D:\6sem\NP\tmgAnil> javac ProtocolSupportChecker.java
PS D:\6sem\NP\tmgAnil> java ProtocolSupportChecker example.com:80
Checking supported protocols for: example.com:80
HTTP supported.
HTTPS not supported.
FTP supported.
PS D:\6sem\NP\tmgAnil> ▯
```

Output:

```
HTTP supported.
PS D:\6sem\NP\tmgAnil> javac WebPageDownloader.java
PS D:\6sem\NP\tmgAnil> java WebPageDownloader http://www.example.com output.html
Web page downloaded successfully to output.html
PS D:\6sem\NP\tmgAnil>
PS D:\6sem\NP\tmgAnil> javac WebPageDownloader.java
PS D:\6sem\NP\tmgAnil> java WebPageDownloader http://www.example.com output.html
Web page downloaded successfully to output.html
PS D:\6sem\NP\tmgAnil>
```



## Example Domain

This domain is for use in illustrative examples in documents. You may use this domain in literature without prior coordination or asking for permission.

More information...

Output:

```
PS D:\6sem\NP\tmgAnil> java ResolveRelativeURI http://www.example.com/path/ /newpath/page.html
Base URI: http://www.example.com/path/
Relative URI: /newpath/page.html
Resolved URI: http://www.example.com/newpath/page.html
PS D:\6sem\NP\tmgAnil>
```

Output:

```
PS D:\6sem\NP\tmgAnil> javac ObjectDownloader.java
PS D:\6sem\NP\tmgAnil> java ObjectDownloader
Usage: java ObjectDownloader <URL> <output_file>
PS D:\6sem\NP\tmgAnil> java ObjectDownloader https://example.com/file.txt downloaded_file.txt
>>
Failed to download object. HTTP response code: 404
PS D:\6sem\NP\tmgAnil>
```

Output:

```
PS D:\6sem\NP\tmgAnil> javac XWWWFormUrlencodedDemo.java
PS D:\6sem\NP\tmgAnil> java XWWWFormUrlencodedDemo
Response: {"args": {},"data": "","files": {},"form": {"age": "30","city": "New York","name": "John Doe"},"headers": {"Accept"
: "text/html, image/gif, image/jpeg, *; q=.2, */*; q=.2,"Content-Length": "34","Content-Type": "application/x-www-form-urlen
coded","Host": "httpbin.org","User-Agent": "Java/1.7.0_07","X-Amzn-Trace-Id": "Root=1-66b8ab7d-2e9c113c3b567241061c069d"},"js
on": null,"origin": "111.119.49.75","url": "https://httpbin.org/post"}
PS D:\6sem\NP\tmgAnil>
```

Output:

```
PS D:\6sem\NP\tmgAnil> javac GetRequestDemo.java
PS D:\6sem\NP\tmgAnil> java GetRequestDemo
Response Code: 200
Response: {"userId": 1,"id": 1,"title": "sunt aut facere repellat provident occaecati excepturi optio reprehenderit","body":
"quia et suscipit\nsuscipit recusandae consequuntur expedita et cum\nreprehenderit molestiae ut ut quas totam\nnostrum rerum
est autem sunt rem eveniet architecto"}
PS D:\6sem\NP\tmgAnil>
```