**COMPUTING SUBJECT: DNS and IP**

**TYPE:** Assignment

**IDENTIFICATION:** DNSLookUp

**COPYRIGHT:** *Michael Claudius*

**LEVEL:** Beginners

**TIME CONSUMPTION:** 30 min

**EXTENT:** 12 lines

**OBJECTIVE:** Use of IPAddress and Dns classes

**PRECONDITIONS:** Computer Networks Ch. 2.5

**COMMANDS:**

**IDENTIFICATION:** DNSLookUp

The Mission

You are to develop a program, which can lookup IP-adresses of one or more hosts.

Precondition

You have elementary knowledge of C#

Useful C# links

* <http://msdn.microsoft.com/en-us/library/system.net.ipaddress(v=vs.110).aspx>
* <http://msdn.microsoft.com/en-us/library/system.net.dns(v=vs.110).aspx>

*Assignment 1 Application class: DNSLookUp*

Create a new project *DNSLookUp* and with a class IPLookUp with the usual main method.

In main add

IPAddress ip = IPAddress.Parse("127.0.0.1");

Console.WriteLine("IP-adress: " + ip);

String name = Dns.GetHostName();

Console.WriteLine("DNS host name: " + name);

Compile and run!

What is the purpose of *Parse* ?

What is the purpose of *GetHostName* ?

Take a closer look at the class Dns; explore two other methods..

*Assignment 2 Application class: IPLookUp*

Still in main append

string name = “localhost”;

IPAddress[] addrs = Dns.GetHostEntry(name).AddressList;

and add some lines that can print out the name andall ip-addresses for the name

Try to replace “localhost” with “google.com”.

*Assignment 3 Application class: IPLookUp*

Still in main, extend the code to use args in main()-method find the IP-addresses of all the names in args.

Tip: Choose: Properties -> Debug

Then add the names as command line arguments, as maybe shown in the figure below.

