When `host` is executed it will list out all of the IP addresses attached to the domain name. `nslookup` is another command that is similar to `host`, which can be used to query details related to DNS and resolving of names. For example:

```
$ host google.com
google.com has address 64.233.181.105
google.com has address 64.233.181.99
google.com has address 64.233.181.147
google.com has address 64.233.181.106
google.com has address 64.233.181.103
google.com has address 64.233.181.104
```

We can also list out all the DNS resource records as follows:

```
$ nslookup google.com
Server:    8.8.8.8
Address:  8.8.8.8#53

Non-authoritative answer:
Name:  google.com
Address: 64.233.181.105
Name:  google.com
Address: 64.233.181.99
Name:  google.com
Address: 64.233.181.147
Name:  google.com
Address: 64.233.181.106
Name:  google.com
Address: 64.233.181.103
Name:  google.com
Address: 64.233.181.104

Server:    8.8.8.8
```

The last line in the preceding command-line snippet corresponds to the default name server used for resolution.

Without using the DNS server, it is possible to add a symbolic name to the IP address resolution just by adding entries into the file `/etc/hosts`. In order to add an entry, use the following syntax:

```
# echo IP_ADDRESS symbolic_name >> /etc/hosts
```

For example:

```
# echo 192.168.0.9 backupserver >> /etc/hosts
```

After adding this entry, whenever resolution to `backupserver` occurs, it will resolve to `192.168.0.9`.

Showing routing table information

Having more than one network connected with each other is a very common scenario. An example of this is in a college, where different departments may be on separate networks. In this case, when a device on one network wants to communicate with a device on the other network, it needs to go through a device which is common to the two networks. This special device is called a **gateway** and its function is to route packets to and from different networks.

The operating system maintains a table called the **routing table**, which contains the information on how packets are to be forwarded through machines on the network. The routing table can be displayed as follows:

```
$ route
Kernel IP routing table
Destination      Gateway   Genmask       Flags  Metric  Ref  UseIface
192.168.0.0         *      255.255.252.0  U     2       0     0wlan0
link-local          *      255.255.0.0    U     1000    0     0wlan0
default          p4.local  0.0.0.0        UG    0       0     0wlan0
```

Or, you can also use:

```
$ route -n
Kernel IP routing table
Destination   Gateway      Genmask        Flags Metric Ref  Use   Iface
192.168.0.0   0.0.0.0      255.255.252.0   U     2      0     0   wlan0
169.254.0.0   0.0.0.0      255.255.0.0     U     1000   0     0   wlan0
0.0.0.0       192.168.0.4  0.0.0.0         UG    0      0     0   wlan0
```

Using `-n` specifies to display the numerical addresses. When `-n` is used it will display every entry with a numerical IP address, else it will show symbolic hostnames instead of IP addresses in DNS entries for IP addresses that are available.