

## Lab Sheet 5

1. Write a C program
  - (a) to find the host name from IP address
  - (b) to print the MAC address of your machine.
2. Write a simple WWW client program in C / C++ to do the following activities:
  - (a) From the command-line, read (1) the URL from which you can extract the name of the remote WWW server and the file to retrieve and (2) the server port number. Create a socket that is connected to the server machine at the specified port (e.g. HTTP port 80)
  - (b) Send a request to the WWW server using the HTTP protocol format. This will look something like this:  
  
`GET /index.html HTTP/1.0\n\n`
  - (c) Read all the data from the HTTP connection and write it to a temporary file created in your WWW cache (e.g. /tmp/your/loginname) on the local host
  - (d) Spawn an external viewer [fork / exec] to display the file. You can determine the type of viewer by server-side MIME content type information. Your client can simply parse this information and use it to determine which viewer to spawn