CLA CS-101 (A1)
Introduction to Computers
Spring 1995

Homework # 3
Due on Thursday 2/16/95

1 TOMUS is an on-line database of all the libraries of Boston University, which contains over one and a half million volumes and over two and a half million microforms. In this exercise you will learn how to use this facility, which, undoubtedly, will be very useful to you in the future. Using TOMUS you can ask questions like "Give me a list of all the books about Jazz", or "Give me a list of any work by or about Beethoven". In order to start a session on TOMUS, type `telnet tomus` at the Unix prompt and then at the login prompt type `library`. You do not need a password here. You will be asked about the kind of terminal you are using. You should choose `V` and confirm it when it asks for a confirmation by typing `y`. You will be presented with a *Menu* of commands that you can give to the library program. This the *Main Menu*. You can pick any command by typing the letter next to the command. From here on follow directions given by the program. At any point you can get to the main menu by starting a new search which can be done by typing `n` or by pressing the `Esc` key. You can end your interaction with TOMUS by typing `d` at the main menu. This will put you back at the Unix prompt.

- Start a session on TOMUS and answer the following questions:
  - ◇ How many manuscripts of music are there?
  - ◇ How many items are there in the TOMUS library with the word **computer** appearing somewhere in the title?
  - ◇ Find the titles of all books that have `Computer` as a subject AND `Knuth` as an author.
  - ◇ Can you locate the textbook of this course? Can you locate the textbook you are using for any other course of yours? Give the name of the library and the call number for any such textbooks.

2 In this exercise you will surf the Internet by browsing the WWW using Mosaic. Follow the instructions given in class and start your own expedition! You may want to look at Professor Bestavros' own navigation chart (called *BestWeb*) for lots of pointers to interesting resourses. A comprehensive guide to resources on the WWW listed by subject is available through Stanford University's Guide to the Web. It is called *Yahoo* and is accessible from the *BestWeb* (near the bottom, under "Navigators"). Throughout your expedition, write down the URLs of any documents or home pages that you like (the more the better!). You will need these in the last problem of this Homework.

3 In the lecture we talked about Usenet, which is a world-wide bulletin board, where people can exchange information ranging from trivia to scholarly work. In this exercise you will learn how to read articles posted by other users to Usenet and to post an article that others can read. You can read news by using the "tin" program. To do so, proceed as follows:

- ◇ Copy the default ".newsrc" file into your home directory. Do this by typing `cp ~cs101a1/.newsrc ~/.newsrc` at the Unix prompt. The ".newsrc" file identifies to the program "tin" the newsgroups (or bulletin boards) to which you are currently subscribed. By copying the default ".newsrc" you will be automatically subscribed to a number of newsgroups (e.g. Seminars in the Northeast, General postings at BU, Features from Clarinet news, Items for sale at BU, etc.
- ◇ Start the "tin" program by typing `tin` at the UNIX prompt. This program will start by giving you a list of the newsgroups that you are subscribed to (with pending messages to be read) and the number of new (unread) articles in each of them. You may look at other newsgroups by "yanking" them in and out of the list of the newsgroups diplayed on your terminal. You may subscribe to any one by using the "subscribe" command.
- ◇ Read a few articles from some of the groups. As before, "tin" will be displaying a set of commands that you can invoke by typing the first character of the command (e.g. type `q` for "Quit").
- ◇ In order to post a message to a newsgroup, select that newsgroup, and chose the "post" option from tin's menu by typing `w`. Your first (and required) post should be to the newsgroup "bu.test". First, you will be asked to enter a subject for your post and next you will be put inside "emacs" where you can type (and edit) your post. Once you are done, exit emacs and send the posting.

4 In this exercise you are asked to create your own *Home Page* on the World-Wide-Web. In order to so, you need to create a file called `Homepage.html` in your home directory. The grade for this problem will depend on how much work you put in making your home page elegant and interesting to others. You will need to go through the following steps:

- ◇ Start emacs and create a new file `Homepage.html` in your home directory.
- ◇ In that file you may write whatever information you want others to know about you. For example, your name, address, phone numbers, where you come from, your hobbies, your major, ... etc. A good idea to make your document elegant is to use the HTML formatting instructions that we talked about in class. These are described in a document that you can view using Mosaic at URL `file:/home/course/cs101a1/Syntax.html`
- ◇ In that file you are also required to include few pointers to WWW resources that you have discovered and that you liked (the more the better!). You can do that using the `href` HTML command described in class.
- ◇ Once you finish editing your home page, get out of Emacs. Now, you need to change the permissions on your Home Page so as to make it readable to everybody in the CS cluster. To do so, issue the `chmod og+r ~/Homepage.html` from the UNIX prompt.
- ◇ Take a look at your home page using Mosaic. To do so, you need to access the class home page, and from there access the "Student Home Pages", which is part of the course archives. From there, find your own entry and click on it to get to your page.
- ◇ If you find that your Home Page does not look the way you wanted it to be (for example because you mistyped an HTML command), you may want to go back and edit your `Homepage.html` document.

Have Fun!