Appendix F
USING TSP ON A UNIX COMPUTER

There are 3 standard ways to run TSP from the unix command line:

1. tsp to run interactively
2. tsp foo to run in batch mode, input from foo.tsp , output to foo.out
3. tsp FOO to run in batch mode, input from FOO.TSP , output to FOO.OUT

(foo is just an example; other filenames and full pathnames also work fine)

The output file above could be printed with page breaks by the unix command:

```
lpr foo.out
```

Of course, much time and paper can be saved by checking for errors in the output file first with a text editor or a unix command such as

```
fgrep "*** ERROR" foo.out
```

One aspect of TSP that may seem confusing under unix is that any unquoted filenames in commands are translated to uppercase. For example, out bar; creates the databank BAR.TLB. However, this is only confusing if one expects to find bar.tlb with the ls command. The in bar; command will still find BAR.TLB and read it with no problems. The READ command will look for files in both uppercase and lowercase.

For information on reading and writing Excel and Lotus files see section 16.2.

The READ and WRITE commands support the ~username syntax in filenames, so that a filename can be specified relative to some user's HOME directory, like in the C-shell (csh). For example:

```
read(file='~joe/data/j5.dat') x y;
```

looks for the file j5.dat in the user joe's subdirectory named data. read(file='~/world/finn.dat') y1-y4; would look for the file finn.dat in your own subdirectory named world . Of course, it is not necessary to specify full pathnames like this if your data files are in your current directory.