

## **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.