Chapter 13

13.1   The following session shows the sample run.

```
$ addall 1 1 2 3 5 8 13 21 34 55
The sum of the given 10 numbers is 143.
$
```

13.2   No solution needed. Yes, the script works correctly.

13.3   Yes, both scripts work as expected.

13.4   The following command attaches standard input of the shell to the file called data and standard output of the shell to the file called out.

```
$ ( exec > out ; exec ./data )
$
```

The affect of this command execution is that all the commands in the data file are executed and their output is stored in the out file. Thus the out file contains the outputs of the four commands given in the problem.

The `cat` command below shows the contents of the out file.

```
$ cat out
The time now is: Sun Oct 23 22:39:44 PKT 2016
The users presently logged on are:
davis           pts/0           Sep  2 15:23 (:0)
kuhn            pts/0           Sep  2 12:51 (:0)
sarwar          pts/2           Oct 23 20:42 (103.255.4.30)
$
```

Note: We remove the –n option in the second `echo` command for the first line of the `who` command to start at the new line.

13.5   Nothing happens when you type commands at the shell prompt. This is so because the shell reads its input from the data file. Execute the `exec < /dev/tty > /dev/tty` command to bring the environment back to normal, that is making the shell to accept input from the keyboard and send the outputs of the commands to the display screen.

13.6   No solution needed