1. Hafisa has a log book of time spentby her on Moodle. In the log book she keeps track of the 24-hour reading before each time she logs in. The last 10 readings for a particular student in a day are:

   7, 8, 9, 11, 13, 15, 17, 18, 23

   (a) Enter these numbers into R as a variable `mreading`. Use the function `diff` on the data. What does it give? Write down,x, the number of hours between each time Hafisa logs into moodle.

   (b) Use the `max` to find the maximum number of hours, the `mean` function to find the average number of hours and the `min` to get the minimum number of hours for Hafisa between two logins.

2. Happy Gouda's quiz scores in B.Math.(Hons.) are given below

   7, 6, 10, 8, 7, 9, 9, 6, 4, 10, 8, 6, 9, 10

   (a) Enter this into R as a variable `scoreHG`. Use the function `max` to find the highest score, the function `mean` to find the average and the function `min` to find the minimum.

   (b) When confronted by Looser Siva, HG realises that entry 4 was a mistake. It should have been 5. How can you fix this? Do so, and then find the new average.

   (c) What does the below command provide in R ?

   ```
   > sum( scoreHG >= 9)
   ```

   (d) What do you get? What percent of your scores are less than 17 ? How can you answer this with R?

3. Naina's cell phone bill varies from month to month. Suppose in her first year of Super DATA (hons.) program, under the Drop-atmost 10-calls monthly plan, the following monthly amounts were incurred:

   460, 330, 390, 370, 460, 300, 480, 320, 490, 350, 300, 480

   (a) Enter this data into a variable called `Nainabill`. Use the `sum` command to find the amount spent by Naina that year on the cell phone.

   (b) Using R find out what is the smallest amount she spent in a month and the largest amount she spent in a month ?

   (c) How many months was the amount greater than Rs 400? What percentage was this?

   (d) If her monthly loan from NOmoney Bank was Rs 3000. Using R store her balance(after paying her phone bill) in a variable called `freemoney`. Find the average amount available each month for her other expenses.