In the Forest Fires data set -

1. Compute the square of each data point in the X column and store the result in a new column called “X\_square”
2. Compute the sum, mean, median, standard deviation of the following columns -
   1. FMCC
   2. DMC
   3. DC
3. Create another column called “Month”, which has full values of month, i.e “aug” becomes “August”, “sep” becomes “September” and so on
4. Create another Column Day\_Num where day will be from 1 to 7 - 1 being Sunday, 2 being Monday, 3 being Tuesday and so on
5. Find the correlation coefficient (Theory: <http://mathbits.com/MathBits/TISection/Statistics2/correlation.htm>) between X and Y [HINT: research and use cor() function]
6. Find the total rain,wind for each month [HINT: dplyr]
7. Find the mean rain,wind for each month [HINT: dplyr]
8. Find the number of records present for each month
9. Find the number of records for each month-day combo