1. Naina's cell phone bill varies from month to month. Suppose in her first year of Super Math (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`. Find the total amount spent by Naina that year on the cell phone.

b) Create appropriate q1bmatXXXX.Rnw file which contains answers to (a), proceed to create appropriate pdf file and upload it to dropbox folder that you have shared with me.

Due Date: August 8th, 2019
Problems Due: 1,3,4

1. Consider the dataset `mtcars` in R.
   (a) In two to three lines describing the dataset.
   (b) Write down the list of categories considered.
   (c) Construct a Bar Plot for the categories "gear" and "am".
   (d) Find the average miles per gallon given by all the cars considered.
   (e) Implement the below commands do in R and explain the output:
      i.
      ```
      > counts <- table(mtcars$am, mtcars$gear)
      > barplot(counts, col=c("darkblue","red"))
      ```
      ii.
      ```
      > counts <- table(mtcars$vs, mtcars$gear)
      > barplot(counts, col=c("darkblue","red"))
      ```
2. Load the package `UsingR` consider the dataset `cavendish`.
   (a) In two to three lines describing the dataset.
   (b) Provide the five number summary of the three variables considered.
3. Load the package `UsingR` for each of the datasets, `math`, `firstchi`, `pi2000`:
   (a) In two to three lines describing the dataset.
   (b) Plot histograms for each of them.
   (c) Can you estimate the `mean,median, standard deviation` of `math` from the histogram ? Check your answer using R commands.
4. Load the package `UsingR` and consider the dataset `normtemp`
   (a) In two to three lines describing the dataset.
   (b) Plot histograms for temperature and heart rate.
   (c) Plot histograms for female temperature and male temperature.
   (d) Calculate mean temperature for Females and Males.
5. Load the package `UsingR` and consider the dataset `ChestSizes`. It has (tabulated) Quetelet's data on chest measurements of 5,738 Scottish Militiamen.
   (a) Find the mean chest size.
   (b) Plot the tabulated data. Can you decide on a probability density function that it closely resembles ?