Assignment 2

- Your default preloaded R library (called `base`) comes with a number of preloaded datasets. You can check them with `data();`

- Use one of their datasets called: `USPersonalExpenditure`
  - You can also check for its help using `?USPersonalExpenditure`

- Load it as: `df = USPersonalExpenditure;`

- Create a new dataset showing only the percentage consumption of each category in a particular year. Also add an additional row showing overall consumption in each year.
  - Do it with using for loop
    - You may use one or two loops
  - Your answer should look like the output of below code:
    - `rbind(round( t( t(100*df) / colSums(df) ), 2 ), "Total" = colSums(df));`
  - Try to understand what I did above. You can use internet help if you wish!

- Instead of values, now find the growth rates of each category of consumption for each year
  - Use for loops!
  - Now again, compare your answer to the table: `df[,-1] / df[,-5];`
  - Do they match? What did I do above? Explain!
  - With explanation I mean what does the numbers represent and how the above code is doing that in R.
- Find help (and read) about the following functions:
  - `which, head, tail, rnorm, runif, cor, cov`
- Install `dplyr` package. Figure out how to do that from internet!