BSDS 100: Intro to Data Science with R
Assignment 5

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Directions: For all questions in this assignment, write complete sentences and fully answer any question that is asked, and use `R` to answer each question. Provide all `R` code and solutions by *knitting* your final RStudio file into a single file named `[your_name]_CA5.pdf`. Late assignments will automatically have 10 points deducted.

1. Create the following vectors, populated with information about the courses for which you are enrolled this year in addition to one course (any course) that you are not enrolled.

   - `courseNum`: course number of each course
   - `coursename`: course name of each course
   - `courseProf`: name of the instructor for each course
   - `enrolled`: a logical vector indicating whether or not you are enrolled in the course
   - `anticipatedGrade`: your anticipated letter grade in each course, with an `NA` for any course for which you are **not** enrolled
   - `anticipatedHours`: your anticipated hours spent on each class per week based on on your experience so far, with an `NA` for any course for which you are **not** enrolled.

2. Create and print a data frame called `MyCourseDataFrame` by combining all of the above vectors. Assign the names of each column to be the names of the original vectors. Summarize the `type` of each column. Do the data frame variables retain their original classes? Formally test this using appropriate `R` code.

3. Combine the vectors from (1) into a list called `MyCourseDataList`, where each vector is an element of the list. Assign the names of each element to be the names of the original vectors. Do the elements of the list maintain their original classes? Formally test this using appropriate `R` code.

4. Complete questions 1 - 5 of Section 10.5 in the *R for Data Science* course book here http://r4ds.had.co.nz/tibbles.html on Tibbles.