ST555 Homework 11

When you have completed this HW, submit via Moodle the following:

   I.   Submit a .rmd file (R Markdown file)
   II.   Submit a .html, .pdf or word document contains the code and answer generated by R
         Markdown
   III. Meet the R Programming Standard

After installing R and RStudio, write R code and run your code to answer the following
questions:

   1. Calculate the first 50 powers of 2, i.e. 2^n, n=1,2,…,50 via the following steps:
         a. Create a vector called "ints" that contains the integers from 1 to 50. [Hint: revisit
            slide in first module that gives example for help(mean)]
         b. Create a vector called "powertwo" that raises the integers 1 to 50 to the power of
            2
   2. Create a vector called "squared50" that captures n^2 for the first 50 integers, n=1,2,…50.
      Utilize the "ints" vector created in question 1.

   3. Which integer numbers fulfill the condition $2^n = n^2$ for the first 50 integers? Create a
      vector called "equal" that holds the logical operators that answers this question.
         a. How many pairs are there? Have R print out the pairs of "powertwo" and
            "squared50" which satisfy $2^n = n^2$