MTH225 Spring2017 Final Problem 17

The file `MTH225_Spring2017_Problem17.csv` contains a sample from a beta distribution.

Estimate the parameters of the distribution from this sample.

- 2 points: Write R code to read the data and convert it to an R data frame.
- 1 point: Write the data block of a STAN model file that extracts the data from the R workspace.
- 1 point: Write the parameters block of a STAN model file that declares the paramter(s) of your model.
- 2 points: Write the model block of a STAN model file that specifies the priors and likelihood for your model.
- 1 point: Write R code to apply the `extract` function to the data structure output from the `stan` function.
- 1 point: Use the `extract()` function of the RSTAN package to obtain the values for the parameters from the posterior draw.
- 1 point: Use the posterior draw to produce point estimates for the parameters alpha and beta.
- 1 point: Use the posterior draw to produce 95% confidence intervals for alpha and beta.

(10 points possible)